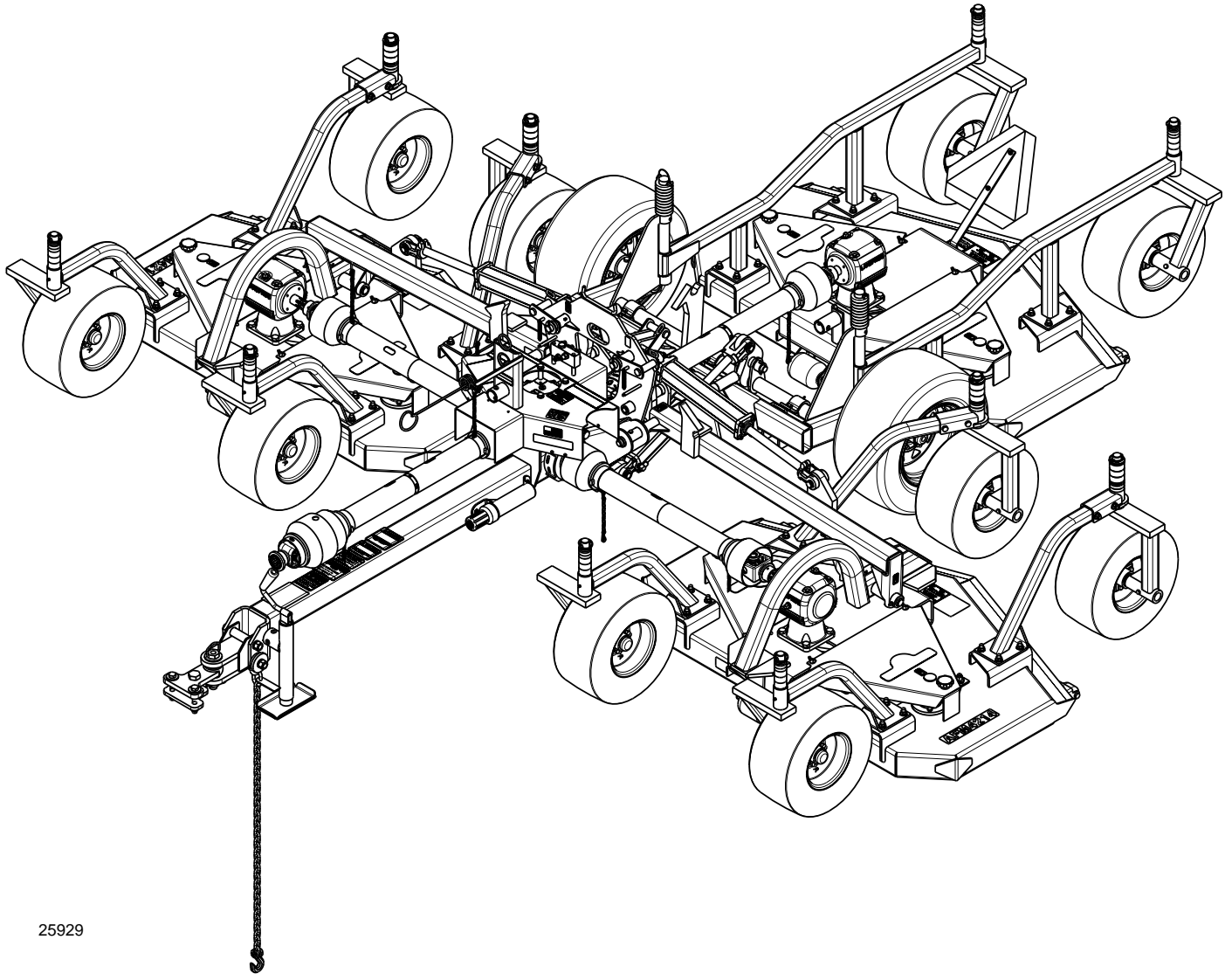


All-Flex Grooming Mowers

AFM4214 and AFM4216



25929

315-587M Operator's Manual



Read the Operator's manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!



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Cover photo may show optional equipment not supplied with standard unit.

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Important Safety Information

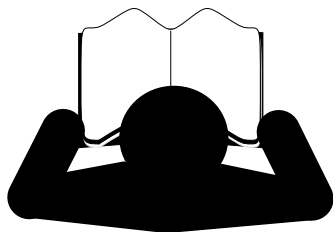
These are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Label" section, read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

- ▲ Operator should be familiar with all functions of the unit.
- ▲ Operate implement from the driver's seat only.
- ▲ Make sure all guards and shields are in place and secured before operating implement.
- ▲ Do not leave tractor or implement unattended with engine running.
- ▲ Dismounting from a moving tractor could cause serious injury or death.
- ▲ Do not allow anyone to stand between the tractor and implement while backing up to the implement.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Wear snug fitting clothing to avoid entanglement with moving parts.
- ▲ Watch out for wires, trees, etc., when raising implement. Make sure all persons are clear of working area.
- ▲ Turning tractor too tight may cause implement to ride up on wheels. This could result in injury or equipment damage.
- ▲ Do not carry passengers on implement at any time.



Look For The Safety Alert Symbol



The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Be Aware of Signal Words

A Signal word designates a degree or level of hazard seriousness. The signal words are:

⚠ DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

⚠ WARNING

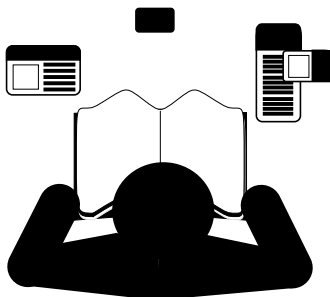
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

⚠ CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

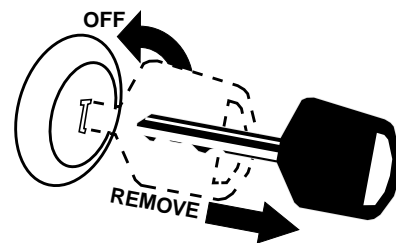
For Your Protection

- ▲ Thoroughly read and understand the "Safety Label" section, read all instructions noted on them.



Shutdown and Storage

- ▲ Lower machine to ground, put tractor in park, turn off engine, and remove the key.
- ▲ Detach and store implements in a area where children normally do not play. Secure implement by using blocks and supports.

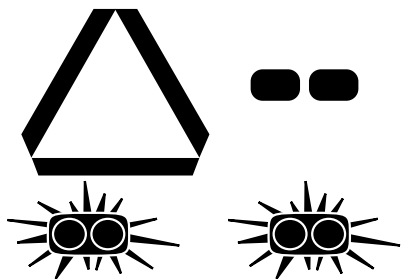


Important Safety Information

These are common practices that may or may not be applicable to the products described in this manual.

Use Safety Lights and Devices

- ▲ Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads.

**Transport Machinery Safely**

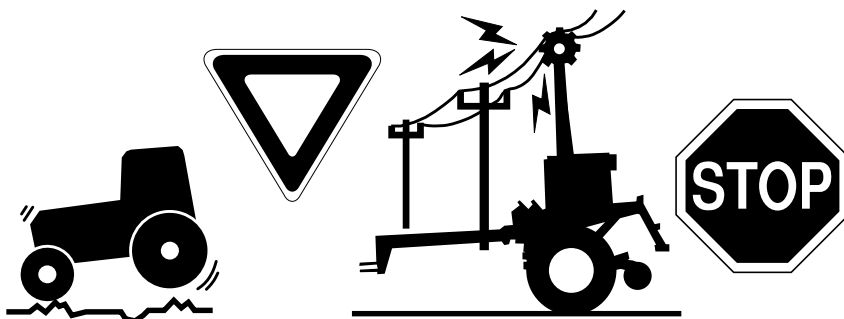
- ▲ Comply with state and local laws.
- ▲ Maximum transport speed for implement is 20 mph. DO NOT EXCEED. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain require a slower speed.
- ▲ Sudden braking can cause a towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes.

- ▲ Use the following maximum speed - tow load weight ratios as a guideline:

20 mph when weight is less than or equal to the weight of tractor.

10 mph when weight is double the weight of tractor.

- ▲ **IMPORTANT:** Do not tow a load that is more than double the weight of tractor.

**Use A Safety Chain**

- ▲ A safety chain will help control drawn machinery should it separate from the tractor drawbar.
- ▲ Use a chain with the strength rating equal to or greater than the gross weight of the towed machinery.
- ▲ Attach the chain to the tractor drawbar support or other specified anchor location. Allow only enough slack in the chain to permit turning.
- ▲ Do not use safety chain for towing.

**Practice Safe Maintenance**

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.

performing maintenance.

- ▲ Allow implement to cool completely.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make sure parts are in good condition & installed properly.
- ▲ Remove buildup of grease, oil or debris.
- ▲ Remove all tools and unused parts from implement before operation.

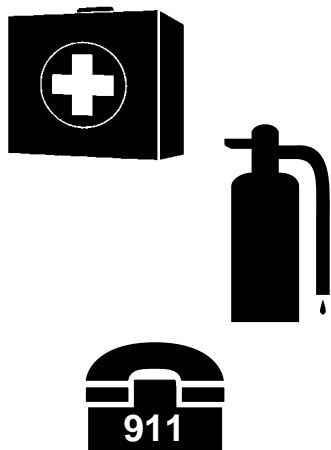


Important Safety Information

These are common practices that may or may not be applicable to the products described in this manual.

Prepare for Emergencies

- ▲ Be prepared if a fire starts.
- ▲ Keep a first aid kit and fire extinguisher handy.
- ▲ Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.

**Wear Protective Equipment**

- ▲ Protective clothing and equipment should be worn.
- ▲ Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.
- ▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- ▲ Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating machinery.

**Avoid High Pressure Fluids Hazard**

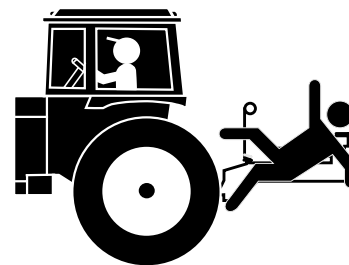
- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
- ▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines or performing work on the system.
- ▲ Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be treated within a few hours or gangrene may result.

**Tire Safety**

- ▲ Tire changing can be dangerous and should be performed by trained personnel using the correct tools and equipment.
- ▲ When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.

**Keep Riders Off Machinery**

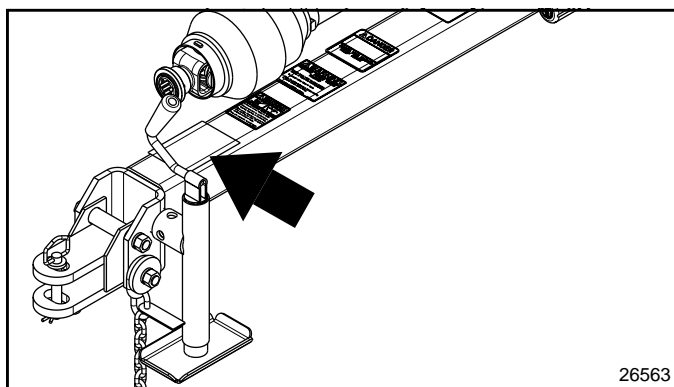
- ▲ Riders obstruct the operator's view, they could be struck by foreign objects or thrown from the machine.
- ▲ Never allow children to operate equipment.



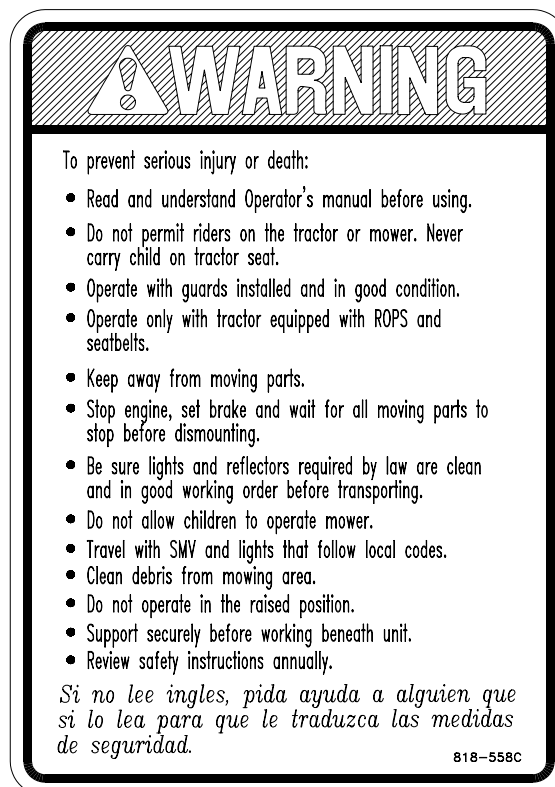
Safety Labels

Your All-Flex Mower comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

1. Keep all safety labels clean and legible.
2. Replace all damaged or missing labels. To order new labels go to your Land Pride dealer.
3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request. To order new labels go to your Land Pride dealer.

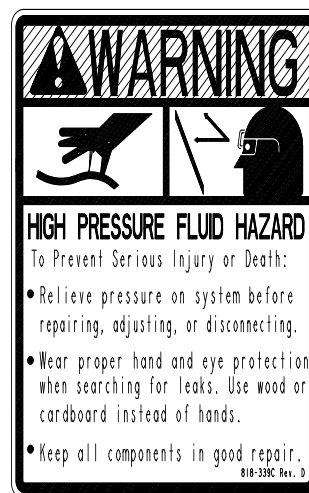
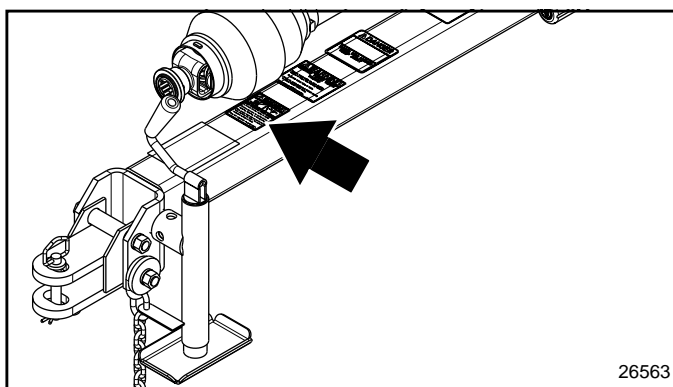


4. Refer to this section for proper label placement.
To install new labels:
 - a. Clean the area the label is to be placed.
 - b. Spray soapy water on the surface where the label is to be placed.
 - c. Peel backing from label. Press firmly onto the surface.
 - d. Squeeze out air bubbles with the edge of a credit card.



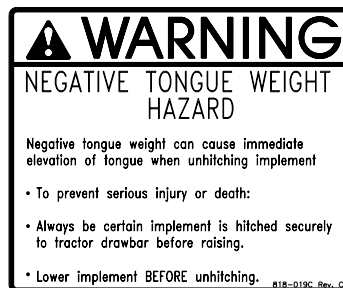
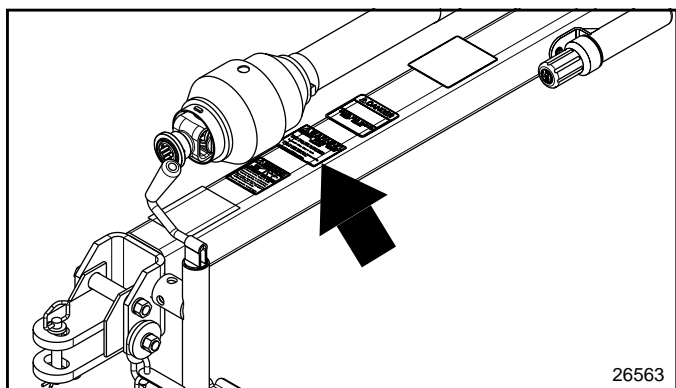
818-558C

Warning: Serious Injury

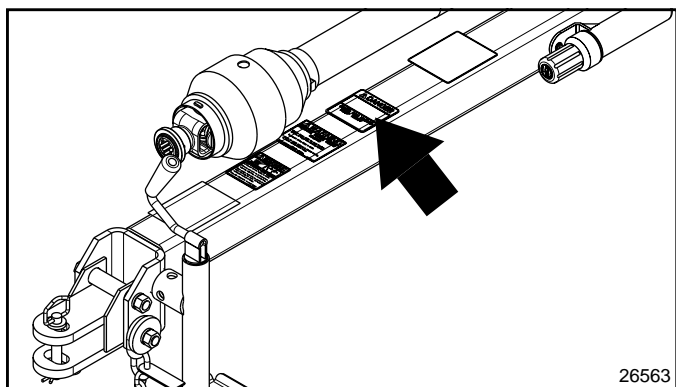


818-339C

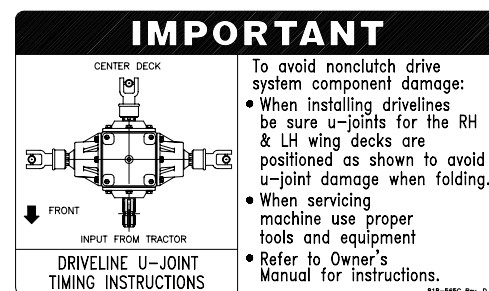
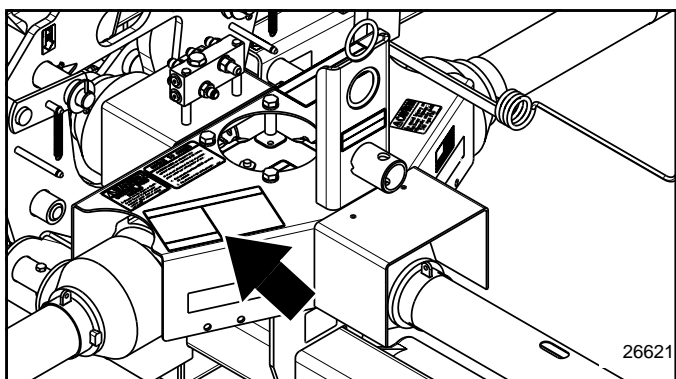
Warning: High Pressure

Important Safety Information**818-019C**

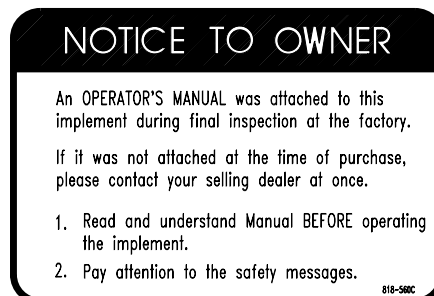
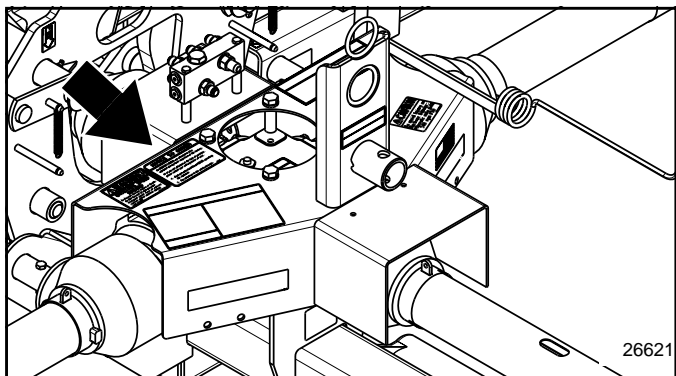
Warning: Negative Tongue Weight

**818-561C**

Danger: Raised Wing

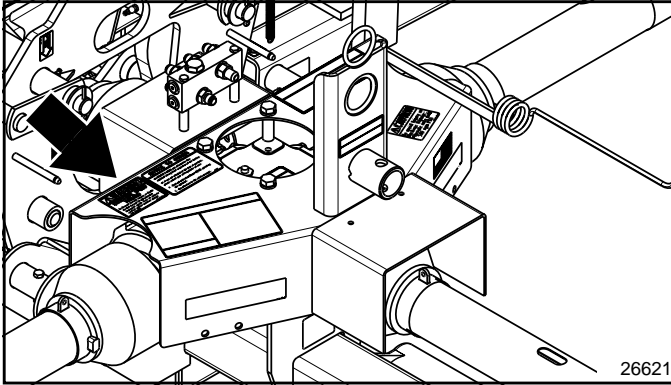
**818-565C**

Important: U-Joint Timing Instructions

**818-560C**

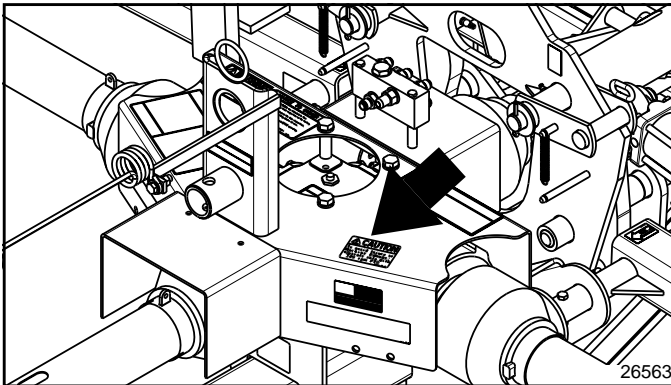
Notice: Manual Info.

Important Safety Information



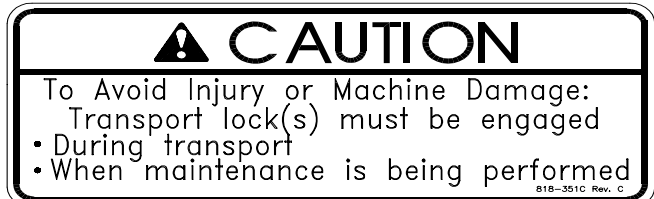
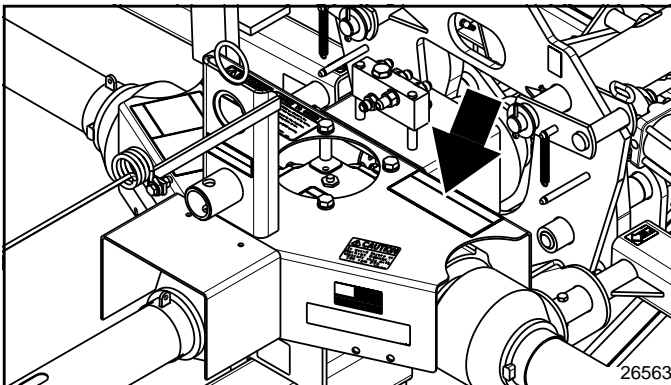
818-337C

Warning: Max Trans Speed



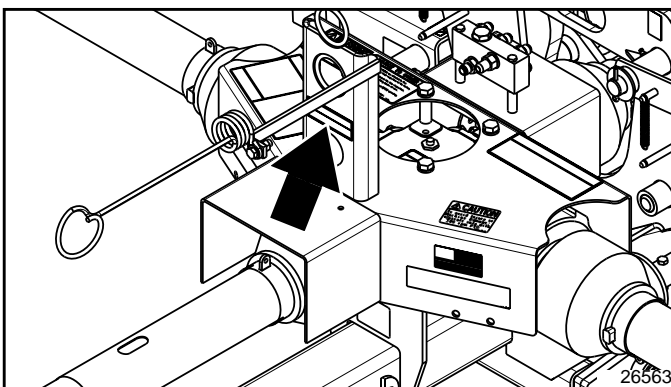
818-130C

Caution: 540 RPM



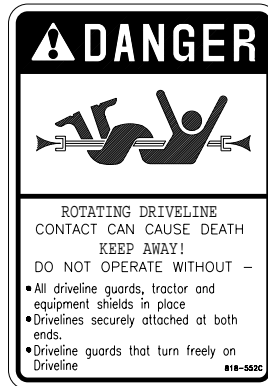
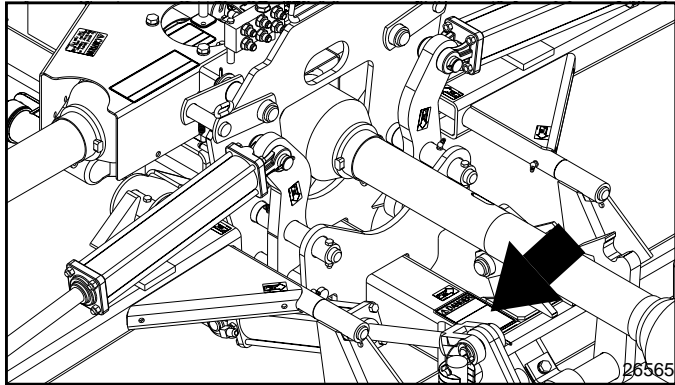
818-351C

Caution: Lock For Transport

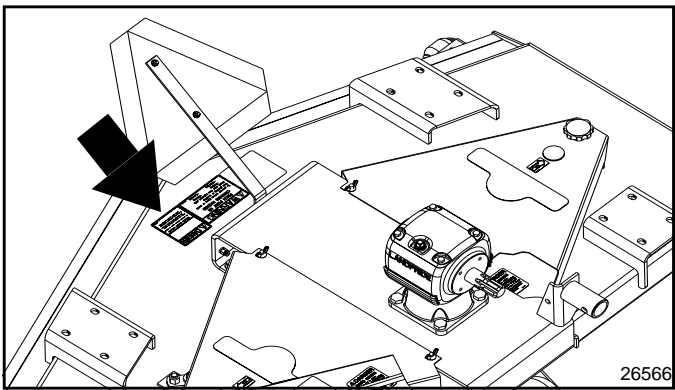


818-353C

Caution: Unlock To Unfold

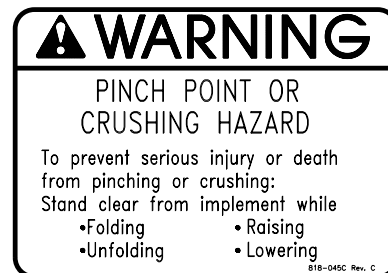
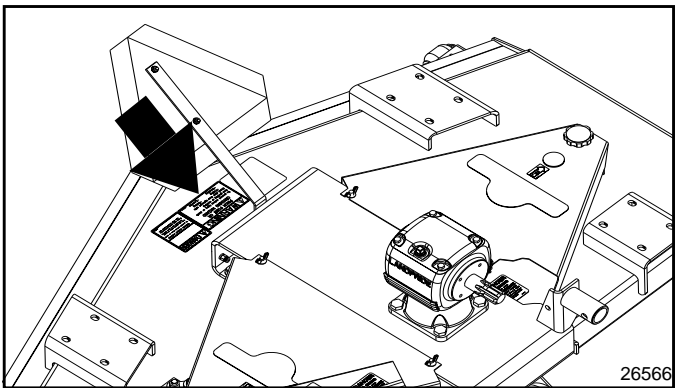
Important Safety Information**818-552C**

Danger: Entanglement

**818-556C**

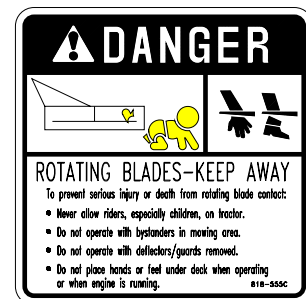
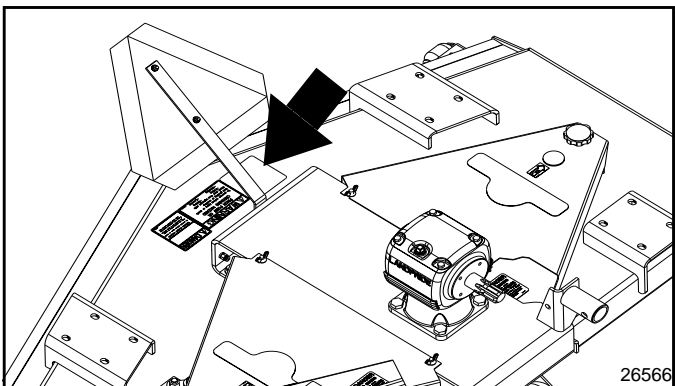
Danger: Thrown Object Hazard

Location: (3-Places) On Back of All Three Decks

**818-045C**

Warning: Pinch point or Crushing Hazard

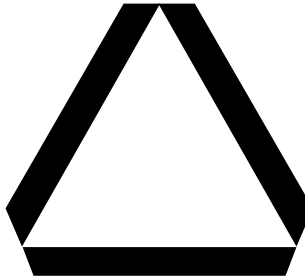
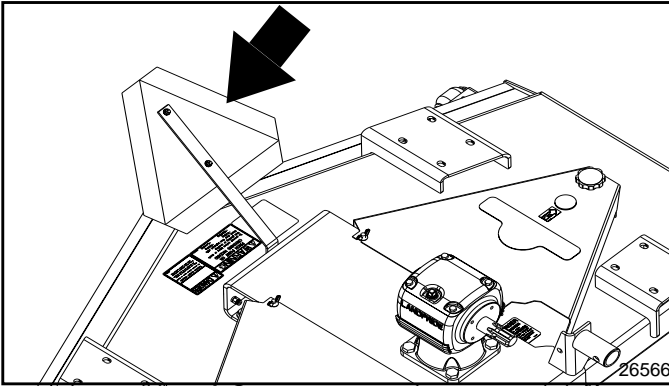
Location: (3-Places) On Back of All Three Decks

**818-555C**

Danger: Rotating Blade

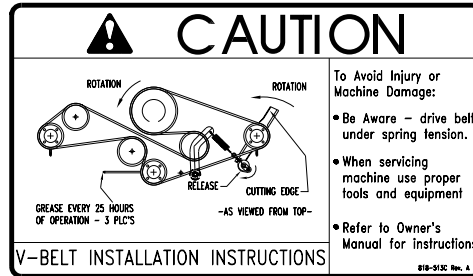
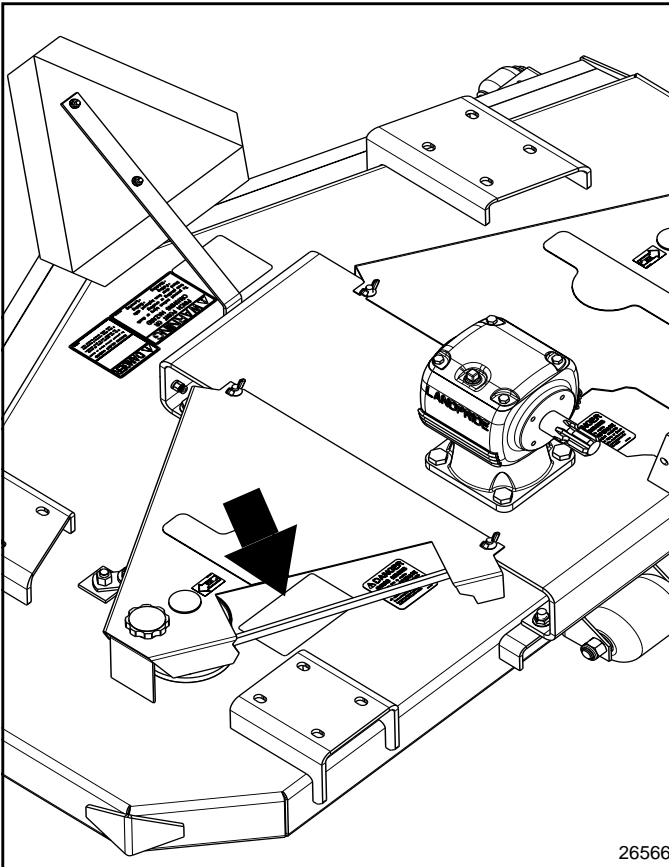
Location: (3-Places) On Back of All Three Decks

Important Safety Information



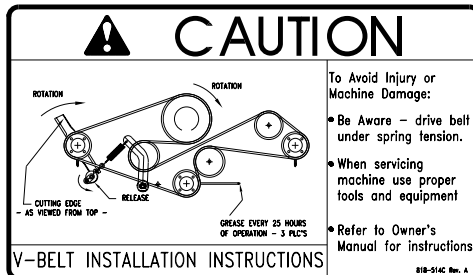
818-003C

Slow Moving Vehicle Label
Location: On Back of Center Deck Only



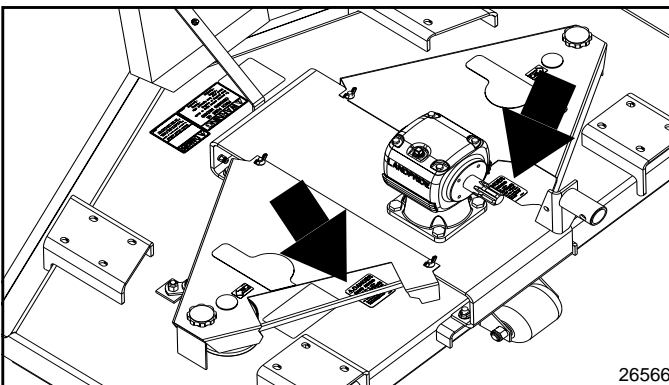
818-513C

Caution: V-Belt Installation
Location: (2-Places) Beneath Guard on Center and Left Hand Decks



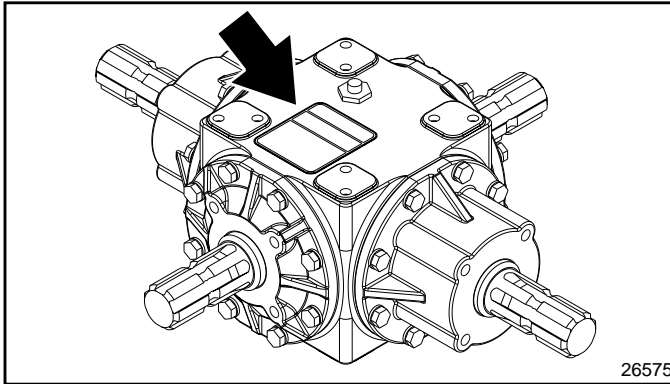
818-514C

Caution: V-Belt Installation
Location: (1-Place) Beneath Guard on Right Hand Deck

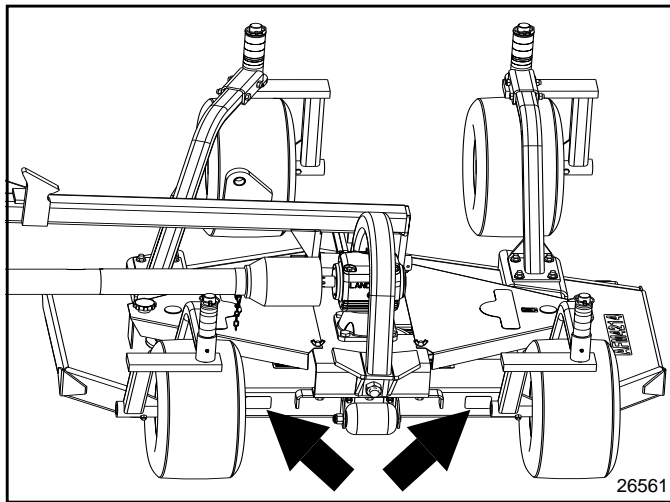


818-543C

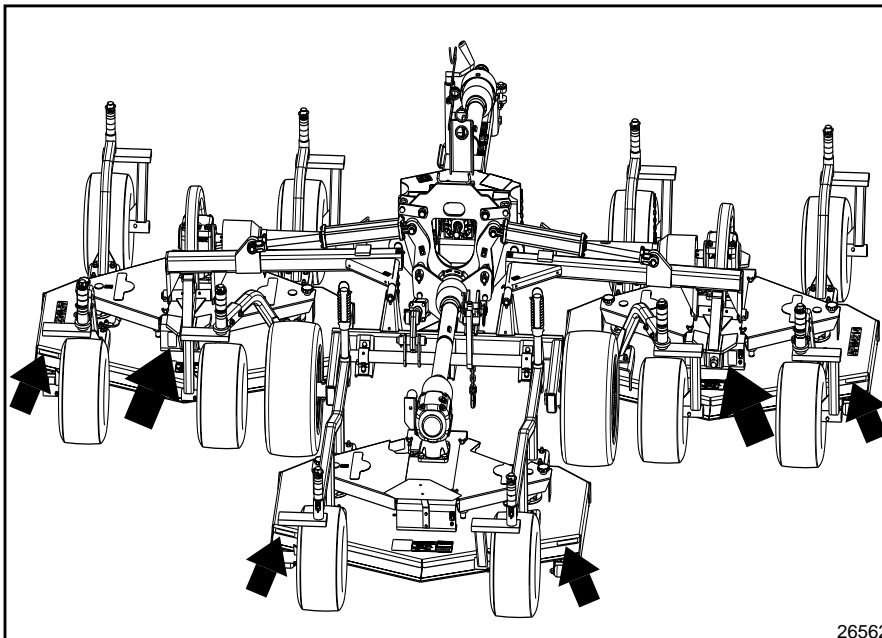
Danger: Guard Missing
Location: (6-Places)
Beneath Both Guards on All Three Decks

Important Safety Information**818-187C**

Danger: Shield Missing
Location: Splitter Gearbox

**818-229C**

Amber Reflector
Location: Front of Wing Decks (Left Wing Shown)

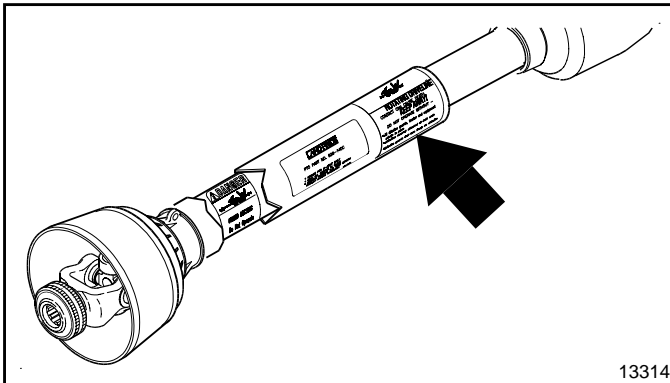
**818-230C**

Red Reflector
Location: 2-Places
(Large Arrows Back of Gearbox Mounts)

818-335C

Red Reflector
Location: 4-Places
(Small Arrows Back of Deck)

Important Safety Information

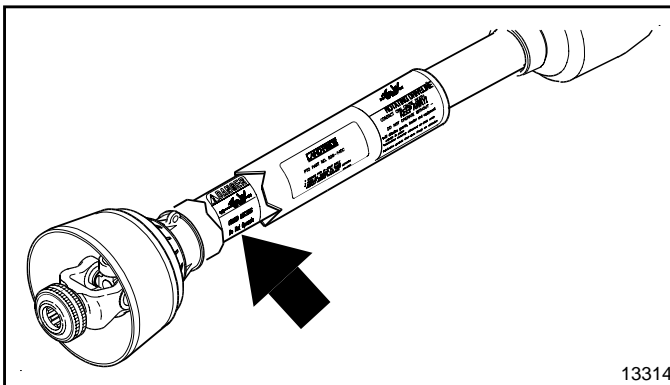


13314



818-552C

Danger: Entanglement



13314



818-540C

Danger: Guard Missing

Introduction

Land Pride welcomes you to the growing family of new product owners.

This AFM42 Series All-Flex Mower has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from the machine.

Application

The AFM4214 (14 foot) and AFM4216 (16 foot) All-Flex Mowers are designed and built by Land Pride to provide excellent cutting quality and performance on lush type turf grasses that are located on expansive and well manicured areas such as sports fields, theme parks, fairways, turf farms, and large estates.

They will deliver excellent performance when attached to 40-70 hp tractors with 540 rpm PTO speed and pull-type draw bar. The hydraulic wing cylinders will easily lift up the wing decks for a 6'-8" overall transport width when moving from one site to another on public streets or on right-of-ways.

The contour following capability, highly productive cutting widths and rear discharge design of the floating cutting decks will greatly reduce wide-area cutting times and still deliver finely groomed surfaces at mowing speeds from 2-6 mph. The AFM4214 and AFM4216 All-Flex Mower can be ordered with slip-clutch or conventional wing driveline configurations and a choice of 15 inch or 18 inch deck tires.

See "**Section 6: Specifications & Capacities**" and "**Section 7: Features & Benefits**" for additional information and performance enhancing options.

Using This Manual

- This Operator's Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
- The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
- To order a new Operator's or Parts Manual contact your authorized dealer. Manuals can also be downloaded, free-of-charge from our website at www.landpride.com.
- Refer to Figure 1. Store your Operator's Manual in the dry storage tube for future reference.

Terminology

"Right" or "Left" as used in this manual is determined by facing the direction the machine will operate while in use unless otherwise stated.

Definitions

NOTE: A special point of information that the operator must be aware of before continuing.

IMPORTANT: A special point of information related to its preceding topic. Land Pride's intention is that this information should be read and noted before continuing.

Owner Assistance

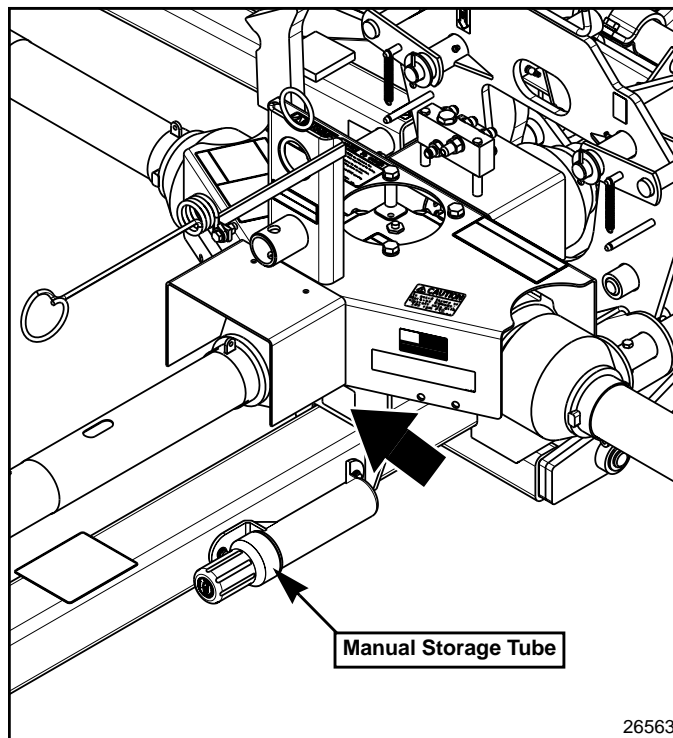
The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

If customer service or repair parts are required contact a Land Pride dealer. A dealer has trained personnel, repair parts and equipment needed to service the implement.

The parts on your All-Flex Mower have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your All-Flex Mower require replacement parts go to your Land Pride Dealer.

Serial Number Plate

For prompt service always use the serial number and model number when ordering parts from your Land Pride dealer. Be sure to include your serial and model numbers in correspondence also. Refer to Figure 1 for the location of your serial number plate.



Serial Number Plate Location
Figure 1

Introduction

Your dealer wants you to be satisfied with your new machine. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. Discuss the matter with your dealership Service Manager making sure he is aware of any problems you may have and that he has had the opportunity to assist you.
2. If you are still not satisfied, seek out the Owner or General Manager of the dealership, explain the problem and request assistance.
3. For further assistance write to:

Land Pride Service Department

1525 East North Street

P.O. Box 5060

Salina, Ks. 67402-5060

E-mail address

lpservicedept@landpride.com

Section 1: Assembly and Set-up

Tractor Requirements

Tractor horsepower should be within the range noted below. Tractors outside the horsepower range must not be used.

Horsepower Rating	40-70 HP
Rear PTO Shaft Type	1 3/8"-6 Spline
Rear PTO Speed	540 RPM
Hitch Type	Draw Bar
Hydraulic Outlets	One Duplex Outlet
Tractor Weight	See Important Note Below

IMPORTANT: Ballast may need to be added to your tractor to maintain steering control. Refer to your tractor's operator manual to determine if additional ballast is needed. This mower has a positive transport tongue weight of approximately 540 lbs. on the AFM4214 and 580 lbs. on the AFM4216.

Hardware Torque Information

When tightening hardware, refer to "Torque Values Chart" on page 43 to determine standard torque values. Refer to "Additional Torque Values" at the bottom of the chart for exceptions to the standard torque values.

PTO To Drawbar Set-Up



CAUTION

Do not over speed PTO or machine damage may result. This mower is designed to be used with a tractor using a rear 540 rpm PTO drive.

Refer to Figure 1-1:

Distances between center of drawbar hitch pin hole to end of tractor PTO shaft ("A" dimension) and from top of drawbar hitch to center of PTO shaft ("B" dimension) must be maintained.

IMPORTANT: PTO damage may occur if distances "A" and "B" are not properly maintained.

Tractor Hook-up

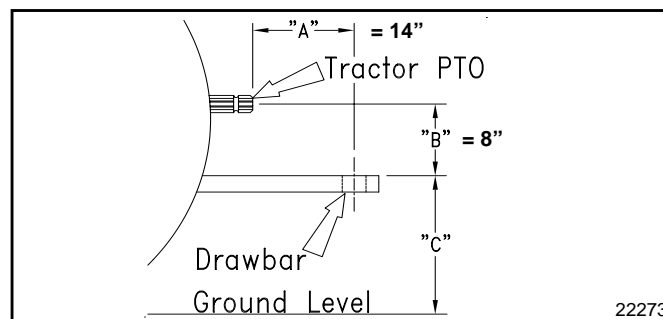


DANGER

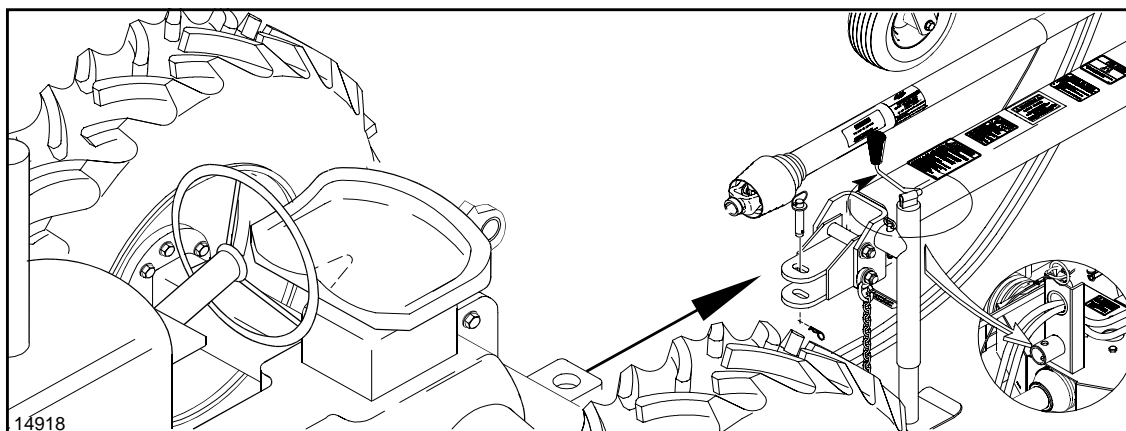
Crushing Hazard between tractor and implement. Do not allow anyone to stand between the tractor and implement while backing-up to an implement. Never operate the hydraulic 3-point lift controls while someone is directly behind the tractor.

Refer to Figure 1-2:

1. Make certain jack stand is properly attached to the mower hitch and secured with attachment pin.
2. Back tractor within close proximity of clevis.
3. Raise or lower jack stand to align clevis with tractor drawbar. Drawbar should fit between lower and upper plates of clevis.
4. Back tractor up to mower hitch until holes in drawbar and clevis are aligned.
5. Attach mower with a 3/4" hitch pin and secure with lock pin. Always use a hitch pin that contains a safety locking device to prevent it from falling out.
6. Retract jack stand until weight of mower is fully removed from the jack. Remove jack and store on storage tube located on divider gearbox shield.
7. Attach safety chain on the frame tongue to the tractor. Adjust chain length to remove all slack except what is necessary to permit turning of mower. Lock chain hook securely onto the chain.



PTO to Drawbar Distances
Figure 1-1



Mower to Tractor Hook-up
Figure 1-2

Section 1: Assembly and Set-up

Main Driveline Installation



WARNING

Damaged drivelines can cause serious injury or death.



CAUTION

Tractor PTO shield and all Grooming Mower guards must be in place at all times during operation!



CAUTION

Always engage parking brake, shut off tractor and remove key before dismounting from tractor.

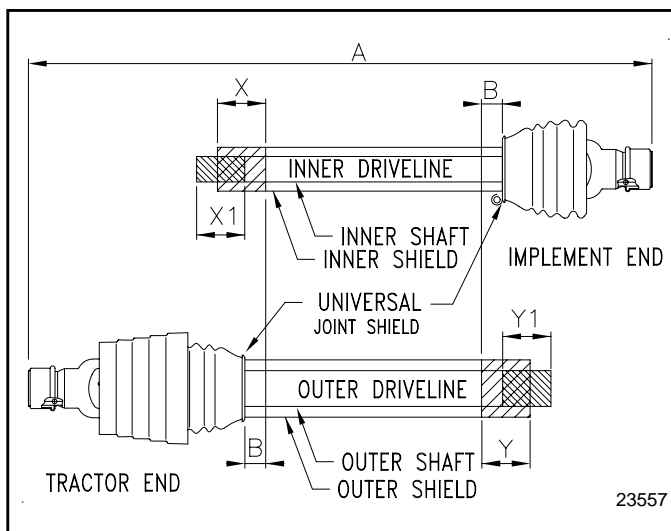
IMPORTANT: The driveline must be lubricated before putting it into service. Refer to "Lubrication Points" on page 31.

IMPORTANT: Some tractors are equipped with multispeed PTO ranges. Be certain your tractor's PTO is set for 540 rpm.

Always engage PTO at low engine rpm to minimize start-up torque on driveline. **Drivelines with friction clutches must go through a "run-in" operation prior to initial use and after long periods of inactivity.** See "Driveline Protection" on page 27" for a detailed run-in description.

Check Constant Velocity Driveline Length

IMPORTANT: Always check driveline length during initial setup and when connecting to a different tractor. Too long a driveline can damage tractor, gearbox and the driveline.



Driveline Shortening
Figure 1-3

Refer to Figure 1-3

- Place tractor gear selector in park, shut tractor engine off, set park brake and remove switch key.
- Attach driveline to mower and tractor as follows:
 - Slide inner yoke of driveline over mower gearbox shaft and secure with locking collar.
 - Slide outer yoke with constant velocity joint over tractor PTO shaft and secure with locking collar.
 - Skip to Step 4 if driveline fits between tractor and Grooming Mower.
- The driveline will require shortening if it is too long to fit between the tractor and Grooming Mower. Shorten driveline as follows:
 - Pull driveline profiles apart into two sections as shown in Figure 1-3.
 - Attach outer driveline universal joint to tractor PTO shaft and inner driveline universal joint to gearbox shaft. Pull on each driveline section to be sure universal joints are secured.
 - Hold driveline sections parallel to each other to determine if they are too long. The inner and outer shields on each section should end approximately 1" short of reaching the universal joint shield on the adjacent section (see "B" dimension). If they are too long, measure 1" ("B" dimension) back from the universal joint shield and make a mark at this location on the inner and outer shields.
 - Cut off inner shield at mark ("X" dimension). Cut same amount off inner shaft ("X1" dimension). Repeat cut off procedure ("Y" & "Y1" dimensions) to cut outer driveline half.
 - Remove all burrs and cuttings.
- With driveline profiles pulled apart, apply multi-purpose grease to the inside of the outer profile and then reassemble the two profiles.
- Attach inner driveline yoke to gearbox shaft and outer driveline yoke to tractor's PTO shaft.
- The driveline should now be moved back and forth to insure that both ends are secured. Reattach any end that is loose.

IMPORTANT: Two small chains supplied with the driveline must be attached to restrict driveline shield rotation.

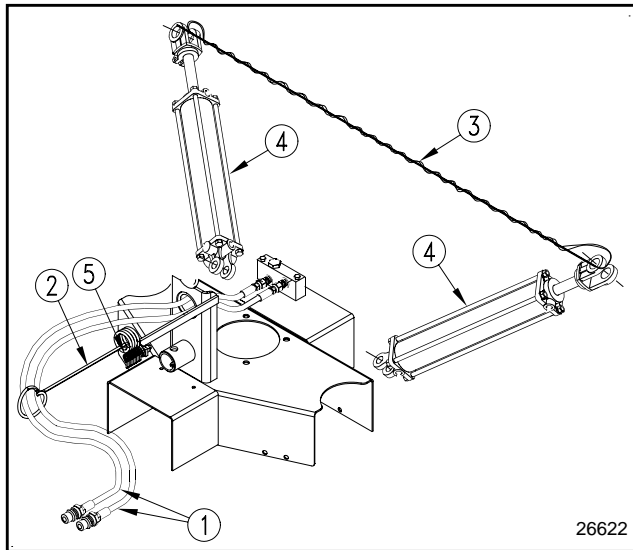
- Hook a safety chain in the hole on the outer driveline yoke shield and its opposite end to the tractor.
- Hook the other safety chain in the hole on the inner driveline yoke shield and its opposite end to the mower.

Section 1: Assembly and Set-up

Hydraulic Hook-up

Refer to Figure 1-4:

This mower is equipped and plumbed from the factory with double acting cylinders, hydraulic hoses and couplings for folding the wings and center deck.



Hydraulic Hook-up
Figure 1-4

1. Cut plastic ties securing hydraulic hoses (#1) to hose support loop (#2). Be careful not to cut plastic tie securing the ten lynch pins (#5) to the support loop.
2. Route hoses (#1) through hose support loop (#2) and connect to tractor remote outlets. Quick disconnect hydraulic fittings for your tractor are supplied attached to the hoses.
3. Locate carbon steel wire (#3) attached between wing cylinders (#4). This wire secures the wing decks in the folded position during shipment. Remove wire and dispose of it in a trash container.

Pull Rope Hook-up

Refer to Figure 1-5:

The operator on the tractor seat will need to be able to access the pull rope from the tractor seat when lowering the folded decks to ground level.

1. Attach pull rope (#1) to an area within the operator's reach. Make sure the pull rope can not become tangled with the operator and driveline.
2. Unfold mower decks as follows:

AFM4216 Model Only

Refer to Figure 2-3 on page 18:

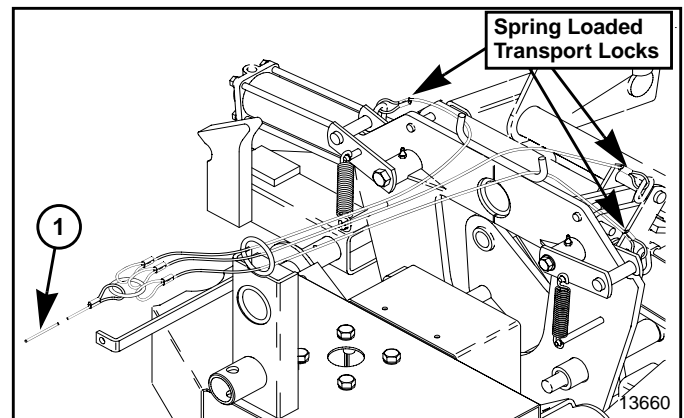
- a. If attached, remove wing deck floating pins and store in storage tube (#2).

AFM4214 & AFM4216 Models

Refer to Figure 1-5:

- b. Retract hydraulic cylinders to remove weight from transport locks.
- c. Pull transport lock rope (#1) toward the tractor to disengage locks.

- d. Hold locks in this position until all 3 mower decks have unfolded enough to allow lock lugs to become fully disengaged.
- e. Extend all 3 cylinders to their maximum stroke.



Pull Ropes
Figure 1-5

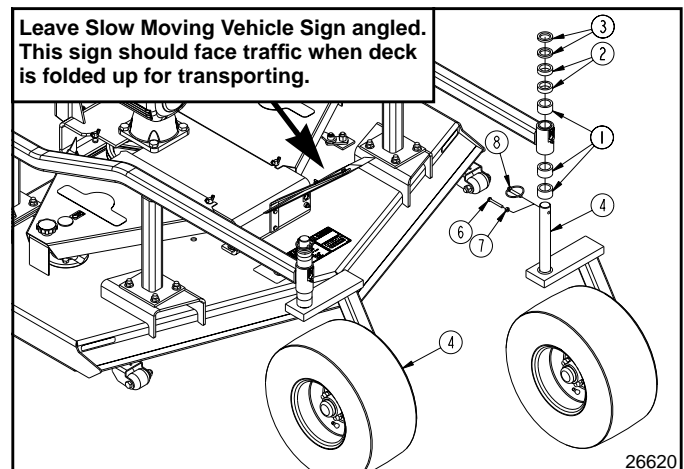
Gauge Wheel Assembly

Refer to Figure 1-6:

IMPORTANT: Do not bend spring steel mounting bracket supporting the slow moving vehicle sign. This sign is purposely angled so that when the deck is folded up for transporting, the sign will face traffic.

Center deck gauge wheels (#4) are mounted in the carrier frames spindle support tubes upside down.

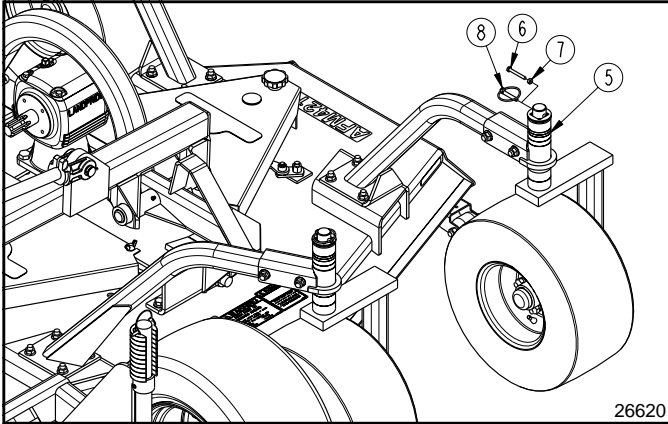
1. Remove nuts (#7) and bolts (#6) from the center deck carrier frames and remove gauge wheels from the frames.
2. Check spacer location on the other gauge wheels. Note how many and what sizes are above and below the gauge wheel spindle support tube and then place an equal number of spacers (#1, 2 & 3) and sizes above and below the spindle support tube while inserting the gauge wheel spindle into the spindle support tubes.



Center Deck Rear Gauge Wheels
Figure 1-6

Section 1: Assembly and Set-up

3. Raise center deck up just enough to insert gauge wheel spindles into the carrier frame spindle support tubes as shown in Figure 1-6.
4. Secure gauge wheels with lynch pins (#8) supplied attached to the support loop with plastic ties. Insert lynch pins from the front and flip clasp shut over the spindles towards the back. Attaching lynch pin in this manner will prevent vegetation from catching on the clasp and flipping it open while traveling forward.



Center Deck Rear Gauge Wheels
Figure 1-7

Refer to Figure 1-7:

5. Lower all mower decks fully down. Decks should be supported by the gauge wheels with gauge wheels on the ground.
6. Remove bolts (#6) from the remaining gauge wheel spindles and replace with remaining lynch pins (#8). Insert lynch pins from the front and flip clasp shut over the spindles towards the back.

Bleeding The Fold Hydraulics

Refer to Figure 1-8:

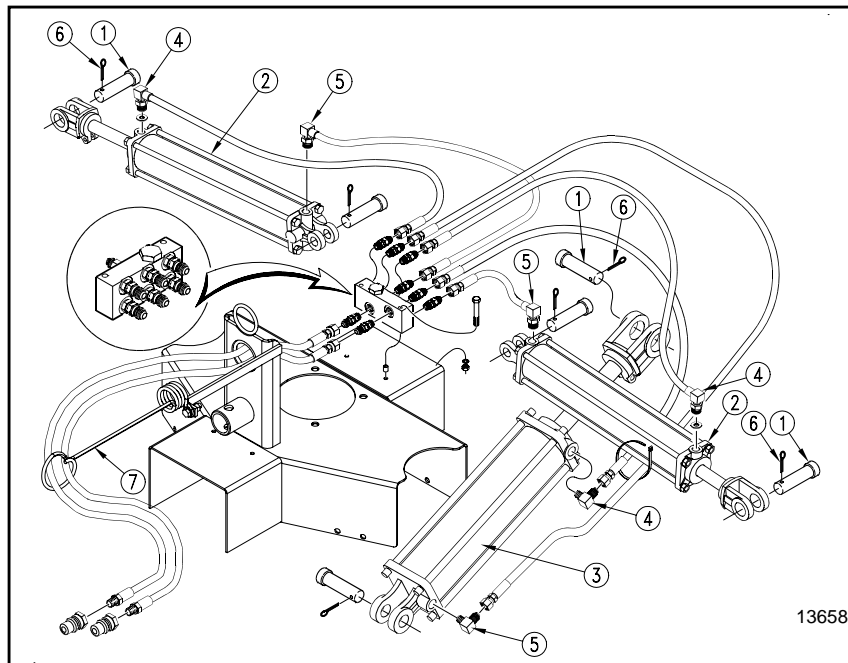


DANGER

Hydraulic fluid under pressure can penetrate skin. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for hydraulic leaks. If hydraulic fluid is injected into the skin, it must be treated by a doctor within a few hours or gangrene may result.

Hydraulic hoses and cylinders are supplied fully charged with oil from the factory and should not require bleeding. If any of the decks raise or lower in a jerking motion, then bleed the hydraulics as follows:

1. With mower decks lowered onto the ground, remove connecting pins (#1) from rod end of the 2 wing cylinders (#2) and center deck cylinder (#3).
2. Support cylinders vertically with rod end up.
3. Cycle hydraulic system to extend both wing cylinders and center deck cylinder. Retract cylinders and repeat this process 2 times.
4. On each cylinder, crack rod end cylinder fitting (#4) and apply hydraulic pressure until air free oil leaks from fitting and then retighten fitting.
5. Support cylinders in a vertical position with base end of cylinder up and repeat bleeding process on the base end fitting (#5).
6. Re-pin all clevises. Secure pins with cotter pins (#6) by bending one or more legs of the cotter pin.
7. Slowly cycle all decks to transport position checking to make sure the hydraulic hoses are not pinched in the process.



Transport Fold Hydraulic Plumbing
Figure 1-8

Section 2: Operating Instructions

Introduction

Hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training involved in the operation, transport, maintenance and storage of the Grooming Mower. Therefore, it is absolutely essential that no one operates the mower without first having read, fully understood and become totally familiar with the Operator's Manual. Make sure the operator has paid particular attention to:

- **Important Safety Information**, pages 1 to 10
- **Section 1: Assembly and Set-up**, page 13
- **Section 2: Operating Instructions**, page 17
- **Section 3: Adjustments**, page 21
- **Section 5: Maintenance and Lubrication**, page 24

Hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training involved in the operation, transport, maintenance and storage of the mower.

IMPORTANT: Do not alter the Grooming Mower in a way which will adversely affect its performance or reliability or use the mower for a purpose for which it was not designed.

DANGER

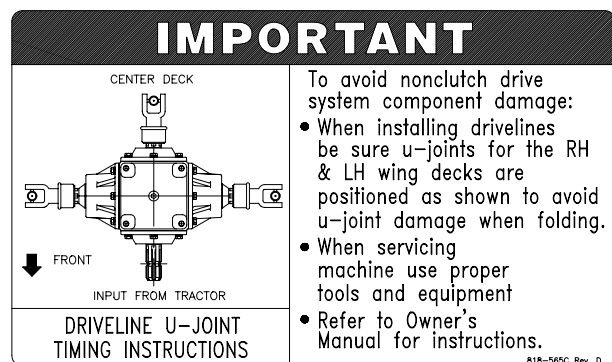
Before making adjustments or performing maintenance on your mower, disengage PTO, shut off tractor and wait for all moving parts to stop before dismounting tractor. Disconnect PTO driveline.

U-Joint Timing

Refer to Refer to Figure 2-1:

CAUTION

On mowers equipped without slip clutches the deck drivelines (3 each) must be in time to avoid driveline damage when folding - unfolding



U-Joint Timing
Figure 2-1

Transporting

WARNING

Do not transport mower faster than 20 mph. When traveling on roadways, transport in such a manner that vehicles moving at a faster rate of speed may pass you safely.

CAUTION

Care should be taken when encountering oncoming traffic and roadside obstructions if the mower is wider than your tractor.

CAUTION

Always disengage tractor PTO before raising the Grooming Mower to transport position to avoid damaging the mower, injury from thrown objects or blade contact.

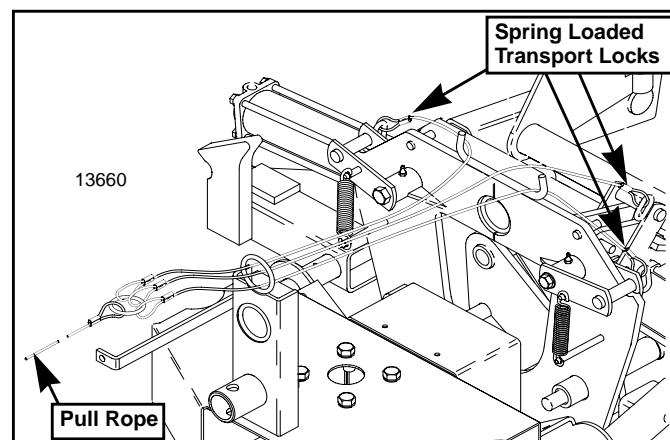
CAUTION

When traveling on public roads, whether at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. Comply with all federal, state, and local laws.

- Be sure to reduce tractor ground speed when turning; and, leave enough clearance so the mower does not contact obstacles such as buildings, trees or fences.
- Select a safe ground travel speed when transporting from one area to another. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
- When traveling over rough or hilly terrain, shift tractor to a lower gear.

Refer to Figure 2-2:

1. Raise the 3 mower decks to the transport position by retracting all 3 cylinders completely.
2. As the mower decks are raising, the transport locks (3 each) will automatically lock in place when operating properly.

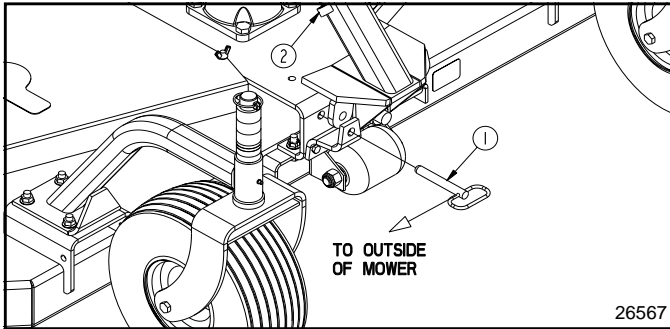


Pull Ropes
Figure 2-2

Section 2: Operating Instructions

Refer to Figure 2-3:

3. **AFM4216 models only.** If narrow transport width is required or if transporting long distances:
 - a. Insert 5/8" deck float pin (#1) in lock hole located to the outside of both mower wing decks.
 - b. Make sure deck float pin is fully inserted.



Model AFM4216 Deck Float Pin
Figure 2-3

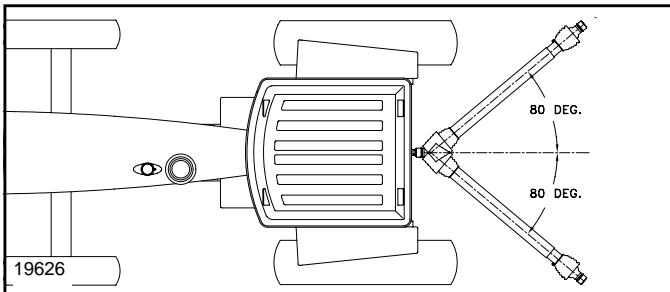
NOTE: Be sure to remove deck floating pins before unfolding mower decks.

4. Refer to "Operating Instructions" on page 19 when lowering the decks.

Constant Velocity Driveline Angle

Refer to Figure 2-4:

The main driveline is equipped with a constant velocity (CV) joint that allows the unit to run at angles up to 80 degrees with no vibration.



Constant Velocity Driveline Angle
Figure 2-4

IMPORTANT: Do not make turns that will subject the CV joint to angles greater than 80°. Angles greater than 80° will damage the driveline.

The constant velocity joint must be greased every 8 hours of operation. Refer to Page 31 "Driveline Constant Velocity Shaft".

Pre-Operation Instructions

Proper servicing and adjustments are key to the long life of any machine. With careful and systematic inspection of the mower, you can avoid costly maintenance, time and repair. Before beginning to operate your All-Flex Mower the following inspection should be performed.

- Grease driveline shaft and all other grease fittings.
- Check oil level in gearboxes. Refer to the *Lubrication* portion of the "Maintenance and Lubrication" section starting on page 24.
- Check all plugs and caps in gearboxes to make certain that they have been replaced and tightened properly.
- Check mower blades for sharpness and damage. See "Blade Inspection" on page 24.
- Be sure blades are installed properly on each deck with the cutting edge leading in rotation. See "Blade Removal And Installation" on page 25.
- Be sure all mower blade bolts are tight. Know which center blade bolts are left hand threaded and which are right hand threaded when checking for tightness. See "Blade Removal And Installation" on page 25.
- Be sure all bolts and nuts are tight.
- Be certain all guards and shields are in place and secure.
- Clear the area to be mowed of objects and debris that might be picked up and thrown by the mower blades
- Operate with 540 rpm PTO tractor.
- Refer to your tractor's operator manual for engaging and disengaging the PTO.
- In case of emergency learn to stop tractor and mower quickly.
- Complete Operating Check List below.

Operating Check List		
✓	Check	Refer
	Read and understand all Safety Rules.	Page 1
	Make sure all gearboxes are properly lubricated.	Page 24
	Read and follow proper tractor hook-up procedure.	Page 13
	Make sure all tires are properly inflated.	Page 43
	Lubricate mower components as needed.	Page 24
	Check mower initially and periodically for loose bolts & pins.	
	Make sure hitch safety chain is securely attached to the mower hitch and tractor.	Page 13
	Inspect cutting blades. Make note of blade wear and sharpness.	Page 24
	Make a thorough examination of the drivelines. Also check connections to the gearboxes and tractor PTO shaft.	
	Make sure all guards and shields are in place.	

Section 2: Operating Instructions

Operating Instructions



DANGER

Never carry a person on the mower. A rider can fall and be ran over by the mower or tractor causing serious injury or death.



DANGER

Stop operation if bystanders come within several hundred feet



DANGER

Do not cut on steep inclines. The tractor and mower could flip over causing damage to the equipment, bodily injury or death.



DANGER

Operate mower with all guards installed & in good condition. Gearbox and driveline shields must be secured in place when operating mower to avoid injury or death from entanglement in rotating drivelines. Keep away from moving parts.



WARNING

The following operating procedures must be carefully read and fully understood. You are the tractor operator and are therefore responsible for the safe operation of this unit. All other persons must be cleared of the area. Mower operation must be stopped when in the vicinity of other persons.



CAUTION

Always disengage tractor PTO before raising the Grooming Mower decks to transport position to avoid damaging the power train, injury from thrown objects or blade contact.



CAUTION

When mowing in sandy soil areas, wear may occur to your mower blades caused from sand erosion. Frequent inspection should be made and blades replaced if damaged.

IMPORTANT:

- Do not engage PTO with mower decks in the raised position or with engine speed above idle. Doing so will damage power train components.
- Do not exceed rated PTO speed of mower. Excessive engine speed will cause damage to power train components.
- Avoid catching hydraulic hoses on brush, post, stumps, and other protrusions that can break them.
- Use mower to cut only turf grasses. Cutting other materials can damage drive components, cutting blades and deck.
- Only use the Grooming Mower for its intended purpose. Do not use it to pull, push or lift objects. Do not use it as a working platform or as a wagon to carry objects.

1. After attaching the tractor to the mower, carefully check all hoses and wires to be sure they will not contact the PTO driveline.
2. Check PTO guards to make sure they are in good condition and in place.
3. Inspect hydraulic hoses for wear, damage and hydraulic leaks. See "Avoid High Pressure Fluids Hazard" on page 3. Replace damaged and worn hoses with genuine Land Pride parts.
4. Check the following after the PTO has been disengaged and comes to a complete stop.
 - Check mower blades for sharpness.
 - Make sure bolts and nuts are tight.
 - Check tractor safety equipment. Be sure they are in good working condition.

IMPORTANT:

- Make sure transport locks are unlatched before unfolding mower. Pull on rope to unlatch locks.
- When unfolding the mower, fully extend cylinders to utilize maximum flexibility. Damage to the mower may occur if the cylinders are not fully extended.

5. Unfold mower decks as follows:

AFM4216 Model Only
Refer to Figure 2-3 on page 18:

 - a. Remove wing deck floating pins.

AFM4214 & AFM4216 Models
Refer to Figure 2-2 on page 17:

 - b. Retract hydraulic cylinders to remove weight from transport locks.
 - c. Pull transport lock rope toward the tractor to disengage locks.
 - d. Hold locks in this position until all 3 mower decks have unfolded enough to allow lock lugs to become fully disengaged.
 - e. Extend all 3 cylinders to their maximum stroke for maximum field float of mower decks.
6. Set the tractor throttle at idle. Engage the PTO to start blades rotating.
7. Begin mowing at a slow forward speed and shift up until desired speed is achieved - maintaining 540 PTO rpm. Mower blades will cut better at 540 PTO blade speed than at reduced throttle.
8. After mowing the first 50 feet, stop and check to see that mower is adjusted properly.
9. Grass is best cut when it is dry. Mowing wet grass can cause plugging resulting in grass clumps behind the mower.
10. Grass should be mowed frequently as shorter clippings deteriorate faster.
11. Mow areas with extremely tall grass twice. Raise mower high for the first cutting and then set mower at finished cutting height for the second cutting.

Section 2: Operating Instructions

General Operating Instructions

By now you should have familiarized yourself with the Operator's Manual, completed the Operator's Checklist, set-up the unit properly and attached your Land Pride All-Flex Mower to your tractor.

With the tractor's park brake engaged and the PTO disengaged, start the tractor. Using the tractor's hydraulic control levers, retract the hydraulic deck-lift cylinders all the way in and pull the ropes leading to your transport locks to release them. With the same control levers, slowly lower your mowing decks from transport position to working position on the ground. Having lowered the decks, shut the tractor off, check to make sure the park brake is set and remove the switch key. Dismount from the tractor and preset your mower to the desired cutting height.

It's now time to do a running operational safety check. It is extremely important that if at any time during this safety check you detect a malfunction in either the mower or tractor that you immediately shut the tractor off, remove the key and set the park brake. Make necessary repairs and/or adjustments before continuing on.

Make sure before starting the tractor that the mower is properly attached to the draw bar with both wings down resting on the ground. Also make sure the driveline is securely coupled to the tractor's PTO shaft, the hydraulic hoses are properly attached to the tractor's hydraulics, the tractor's park brake is engaged and the tractor's PTO drive is disengaged. Starting the tractor and set the engine throttle speed at a low idle. Engage the tractor's PTO drive. If everything is running smoothly, slowly increase the engine rpm until the tractor's engine reaches full PTO operating speed of 540 rpm. If everything is still running as it should, then return the engine to low idle and disengage power to the PTO. Under no circumstances should you ever raise the cutting decks into transport position with the PTO drive engaged. Personal injury and machine damage could result.

You should now be ready to move to your cutting site to begin mowing. On roadway transport in such a manner that faster moving vehicles can easily see you and pass you safely. Reduce your speed when traveling over rough and hilly terrain. Avoid quick or sharp steering corrections. Take extra care to insure that the mower doesn't come into contact with obstacles such as trees, buildings or fences. Use accessory lights and appropriate reflective devices to provide adequate warning to pedestrians and other vehicle operators when traveling on public roads and in the dark of night. Comply with all local, state and federal laws.

It is important that you inspect the area where you will be cutting and clear it of safety hazards and foreign objects either before or after you arrive at the cutting site. Never assume the area is clear. Cut only in areas you are familiar with and are free of debris and unseen objects. In the event you do strike an object, stop the mower and

tractor immediately to inspect and make any necessary repairs before resuming operation. It really pays to inspect a new area and to develop a safe plan before mowing.

You will need to maintain a ground speed between 2-6 mph and 540 rpm PTO speed to produce a clean cut. Make a tractor gear and range selection that will enable you to maintain these speed combinations. Generally the quality of cut is better at lower ground speeds. Dense ground cover will create the need to slow down even more. In certain conditions tractor tires will roll grass down resulting in an uneven cut when the grass fails to rebound. Should this happen you may try reversing the direction of cut and/or double cut to achieve the desired finish.

Avoid very low cutting heights especially on extremely uneven terrain. Always cut downward on slopes and avoid crossing the face of steep slopes. Avoid sharp drops and cross diagonally through dips to prevent hanging up the tractor and mower. Slow down in turns and avoid sharp turns if at all possible. Remember to look back often.

Now you're prepared and well briefed you may begin cutting. Begin cutting by doing the following:

- Reducing the tractor's engine rpm.
- Make sure the mower is on the ground in cutting position.
- Engage the PTO.
- Raise the engine rpm to the appropriate PTO speed.
- Begin mowing.

Make wide turns when possible. Operators of pull-type models must plan ahead and choose a cutting pattern that allows for wider turns. Try increasing or decreasing ground speed to determine the effect on quality of cut. With a little practice you will be pleased with what you and your Land Pride All-Flex Mower can do.

Whether you are done mowing, need to take a break, or just need to make a few adjustments to the mower, remember to always do the following:

- Reduce the tractor's engine rpm.
- Disengage the PTO.
- Stop on level ground.
- Set the park brake.
- Turn off the engine and remove the key.
- Stay on the tractor until the mower blades have come to a complete stop.

Section 3: Adjustments

Deck Height Adjustments



DANGER

Before making adjustments or performing maintenance on your mower, disengage PTO, shut off tractor and wait for all moving parts to stop before dismounting tractor. Disconnect the PTO driveline.



CAUTION

Block decks up before making cutting height adjustments.

These adjustments should be made with mower hooked-up to the tractor that will be used for field operations or one having the same drawbar height. Position mower on a level surface and adjust hitch so that the main frame is level to the ground. Tire pressure will affect mowing height. Be sure all tires have proper psi pressure. See "Tire Inflation Chart" on page 43.

IMPORTANT: Refer to "U-Joint Timing" and "Transporting" on page 17 for instructions on raising and lowering the decks before continuing.

Refer to Figure 3-1:

1. Lower mower decks fully down on a flat level surface.
2. Make measurement (A) (top of deck to ground) on all three decks. Check measurements in Cutting Height Chart to determine if the decks need to be raised or lowered to obtain preferred cutting height (B).
3. Raise all three mower decks up to an adequate height and block under the decks to prevent them from falling during gauge wheel height adjustments.

Refer to Figure 3-2:

4. Add or remove spacers below the spindle tubes equal to the number of inches the gauge wheel needs to be adjusted. Adding spacers will raise the cutting height and removing spacers will lower the cutting height. When finished, all 10 gauge wheels will usually have an equal number of spacers below the spindle tubes. See note below.

NOTE: Due to manufacturing tolerances and tire size differences, it may be necessary to readjust some spacers. Because of this, you may not end up with equal number of spacers on all gauge wheels.

Cutting Height Chart

A	B	A	B
4 5/8"	3/4"	7 1/8"	3 1/4"
5 1/8"	1 1/4"	8 1/8"	4 1/4"
6 1/8"	2 1/4"	9 1/8"	5 1/4"

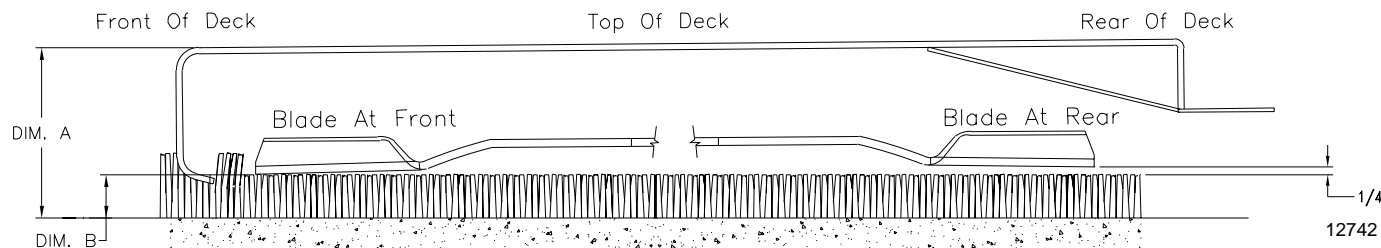


Figure 3-1

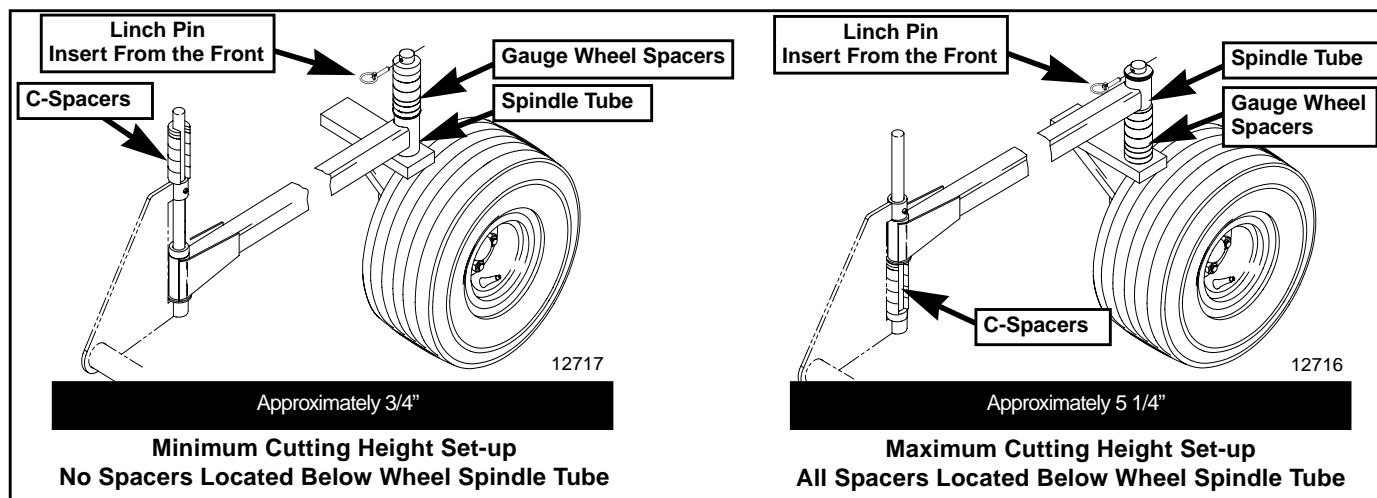


Figure 3-2

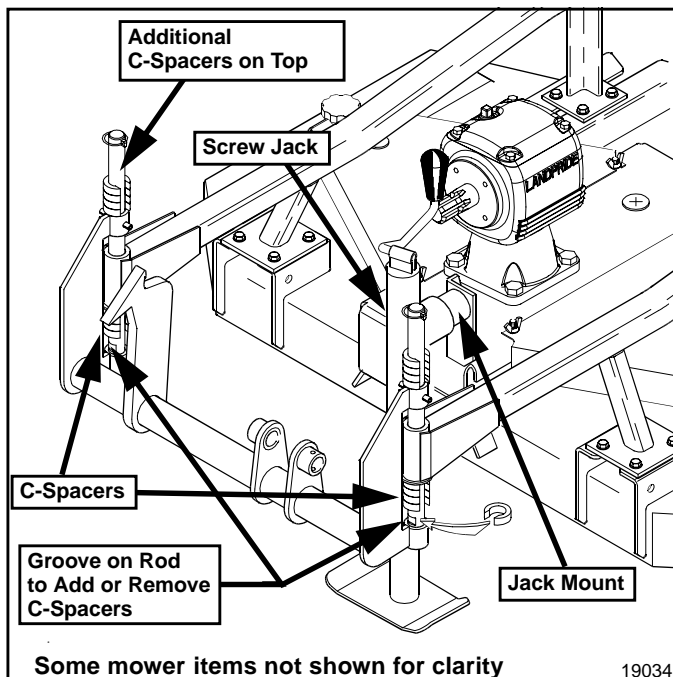
Section 3: Adjustments

IMPORTANT: Linch pins should always be inserted into the gauge wheel spindle pin holes from the front so that the locking clasp is flipped shut over the spindle towards the back. Attaching the pin in this manner will prevent vegetation from catching on the clasp and flipping it open while traveling forward.

5. After making height adjustments, always replace linch pins by inserting them into the gauge wheel spindle pin holes from the front to keep from losing the pins and gauge wheels.
6. Lower mower decks to the field position making sure all fold cylinders are fully extended.

Refer to Figure 3-3:

7. Adjust front of center deck height to match height at rear of center deck:
 - a. Attach jack stand to jack mount located in front of the center gearbox channel. Make sure stand is secured with attachment pin.
 - b. Screw jack out to lift front of mower deck and in to lower deck front.
 - c. Place same number and thickness of c-spacers below the spindle tube as what was placed below the rear gauge wheel spindle tubes.
 - d. There is a groove in the carrier rod for adding or removing c-spacers. Turn the c-spacer so that the open end will slide in or off the groove as needed.
 - e. Remove jack stand and return it to the storage tube located in front of the divider gearbox.
 - f. Place additional c-spacers above metal spindle tubes.



Adding or Replacing Spacers
Figure 3-3

8. Take measurements from the same location on all three decks to make sure they are at the same cutting heights.
9. Additional fine tuning adjustments may be needed after a test mowing run.

IMPORTANT: Slide-on spacers for the front of the center deck are all 1/2" long, so double the quantity of the spacers vs. the spacers on the gauge wheels (i.e., two 1" spacers used on gauge wheel vs. four spacers on the front center deck adjustment).

Belt Tension

Refer to Figure 3-4:



CAUTION

Belt drive system under spring tension; use care to avoid bodily harm!

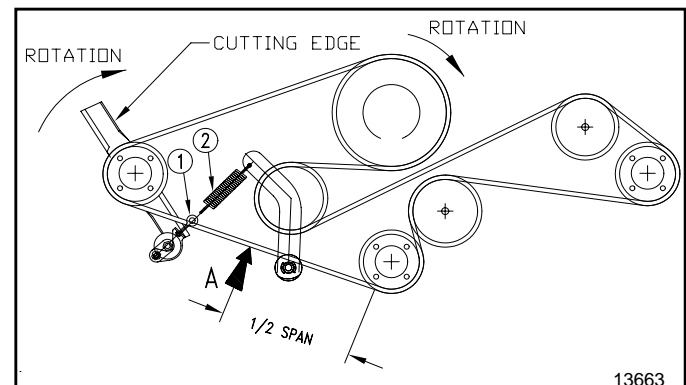
1. Check belt tension by applying force at arrow "A" with a tension tester until belt deflects 1/4". The force required to get this deflection should range from 7 to 10 lbs.
2. Adjust belt tension by adjusting eyebolt (#1) as needed. This adjustment will increase or decrease tension on spring (#2).

Excessive Belt Tension May Lead to:

- Premature belt damage and drive components.
- A safety hazard to the operator or bystanders.

Not Enough Belt Tension May lead to:

- Premature belt damage due to excessive slipping.



Belt Tension (Top View of Left Hand Deck Belt)
Figure 3-4

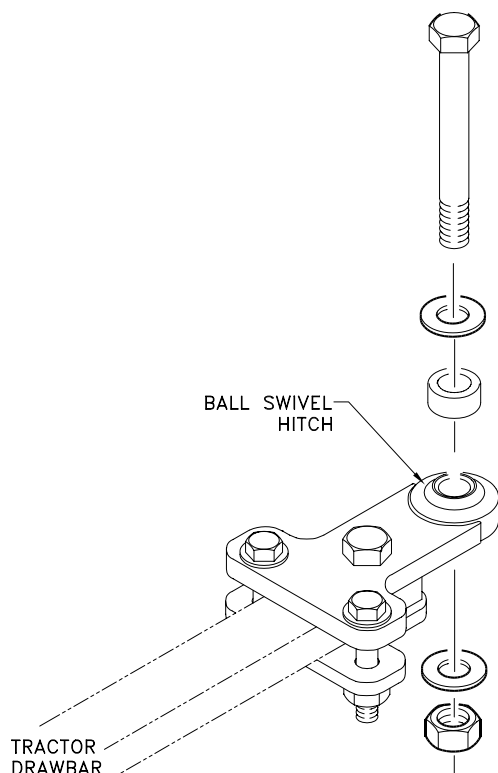
IMPORTANT: Belt tension should be checked on new belts after approximately 20 hours of operation.

Section 4: Accessories

Ball Swivel Hitch

Refer to Figure 4-1:

The ball swivel hitch clamps firmly to your tractor's drawbar. With this accessory the center deck can pivot about the drawbar in all directions reducing twisting torque and allowing the deck to mow a more even height. Hillsides and uneven terrain are ideal for its use. See your local Land Pride Dealer for the ball swivel hitch accessory.



**Ball Swivel Hitch
Figure 4-1**

Cutting Blades

There are four blade choices to select from based upon soil condition, density of grass, and tractor horsepower. The appearance of the finish cut may vary between low lift and high lift blades. See your Land Pride dealer for blade availability.

Low Lift Blades (Standard)

Land Pride's low lift blades are designed for mowing over sandy soil terrain where high suction lift is not crucial. Sand drawn into the blades accelerates blade wear more than normal. Low lift blades are recommended because they produce a lower suction keeping sand uplift and blade wear to a minimum.

Medium Lift Blades

Land Pride's medium lift blades are great when horsepower is a concern. They produce a medium suction for lifting grass requiring less horsepower than high lift blades.

High Lift Blades

Land Pride's high lift blades develop the greatest suction for lifting grass before cutting for that fresh clean cut look. However, they may require more horsepower especially when cutting tall dense grass. They are not recommended for sandy soil conditions.

Mulching Blades

Land Pride's mulching blades are designed to chop leaves and/or grass into smaller parts leaving your lawn looking fresher and cleaner than ever before.

Accessory Part Numbers

Land Pride All-Flex Mower Accessories

Part No.	Part Description
Ball Swivel Hitch	
315-370A	Ball Swivel Hitch
Low Lift Blades Kit for 1 unit (9 blades)	
315-262A	AFM4214 (Kit)
315-259A	AFM4216 (Kit)
Medium Lift Blades Kit for 1 unit (9 blades)	
315-263A	AFM4214 (Kit)
315-260A	AFM4216 (Kit)
High Lift Blades Kit for 1 unit (9 blades)	
315-264A	AFM4214 (Kit)
315-261A	AFM4216 (Kit)
Mulching Blades Kit for 1 unit (9 blades)	
315-467A	AFM4214 (Kit)
315-468A	AFM4216 (Kit)

Blades are also offered in Kits for 3 units (27 blades). See your Land Pride dealer for blade availability.

Section 5: Maintenance and Lubrication

Maintenance

Proper servicing and adjustment is the key to the long life of any machinery. With careful and systematic inspection, you can avoid costly maintenance, time and repair.

CAUTION

For safety reasons, each maintenance operation must be performed with tractor PTO disengaged, the mower lowered completely to the ground or folded with the transport locks engaged and the tractor engine shut off with ignition key removed.

WARNING

Always secure mower deck in the up position with solid supports before servicing the underside of the mower. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or if hydraulic lines burst. Either situation can drop the mower instantly even when power to the hydraulics is shut off.

- Frequently inspect mower for loose bolts and nuts. See "Blade Removal And Installation" on page 25 to identify left hand threaded bolts. Tighten all hardware as indicated in the "Torque Values Chart" on page 43.
- Check drive belt tension after several hours of mowing. Refer to "Belt Tension" on page 21.
- Lubricate components as listed under "Lubrication Points" starting on page 24.
- Always maintain proper air pressure in the tires. Refer to "Tire Inflation Chart" on page 43.
- Replace worn, damaged or illegible safety labels by obtaining new labels from your Land Pride Dealer. See Information about "Safety Labels" starting on page 5.

Servicing Mower Blades

Blade Inspection

WARNING

DO NOT attempt to modify cutting blades such as hard surfacing, heat treating, cold treating or by any other method.

WARNING

DO NOT try to straighten a blade that is bent. Never weld a broken or cracked blade. ALWAYS replace with a new Land Pride blade to assure safety.

DANGER

Always disconnect main driveline from tractor PTO before servicing underside of mower deck. Starting the tractor with a connected driveline can result in damage to the mower, bodily injury or death.

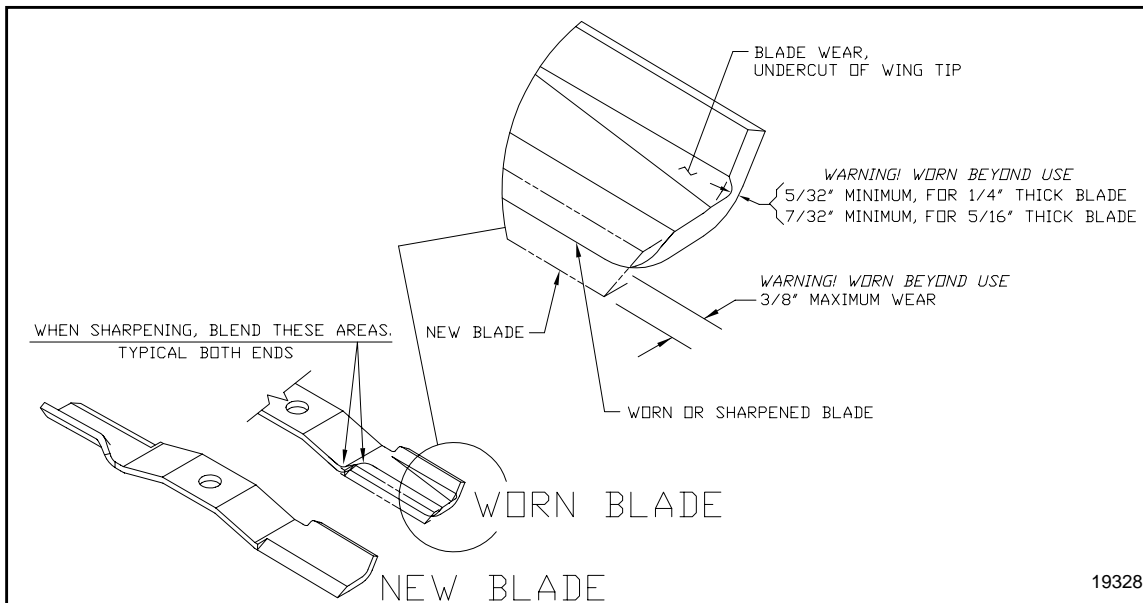
CAUTION

Wear a pair of gloves when checking blades. Avoid direct contact with cutting edge of blades.

Refer to Figure 5-1:

Blade Wear: Blade performance is reduced as blades wear and are sharpened for reuse. Excessively high wear can occur to your mower blades when mowing in sandy soil areas. Frequent inspection should be made and blades replaced if damaged.

Bent, Deformed or Split Blades should be removed from unit and discarded. **DO NOT** attempt to straighten a blade for reuse.



Blade Placement
Figure 5-1

Section 5: Maintenance and Lubrication

Blade Removal And Installation



CAUTION

Depending on blade rotation, bolts attaching mower blades to their respective spindles may be either left hand or right hand. Prevent spindle and/or bolt damage by knowing which hand the threads are before removing and/or tightening any blade mounting bolts.

Refer to Figure 5-2 & Figure 5-3:

1. Verify blade rotation and bolt thread type (right hand or left hand) before loosening center blade bolts and removing blades to be sharpened or replaced.

NOTE: Blade bolt on the left hand deck is right hand threads. Blade bolts on the right hand and center decks are left hand threads. Refer to Figure 5-5, Model AFM4216 only: The two outside blade bar bolts (#8) are always right hand threads.

Refer to Figure 5-4 & Figure 5-5:

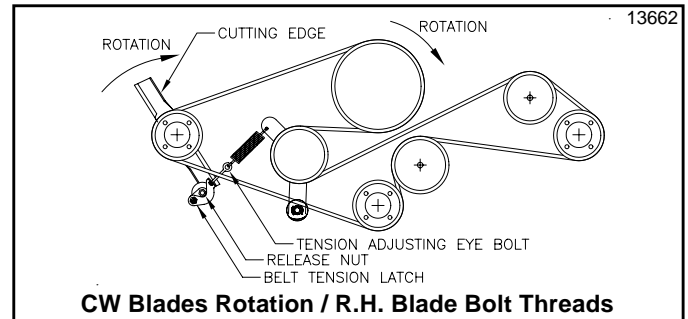
2. Remove blades by grasping the blade end (#1) with a rag or thick padded glove while loosening the blade mounting bolt (#4).
3. Remove blade bolt (#4) and Washer (#5) from blade being replaced.
4. (Model AFM4216 Only.) Remove two outside bolts (#6) from blade bar (#2).

IMPORTANT: Replace blades with Land Pride blades only.

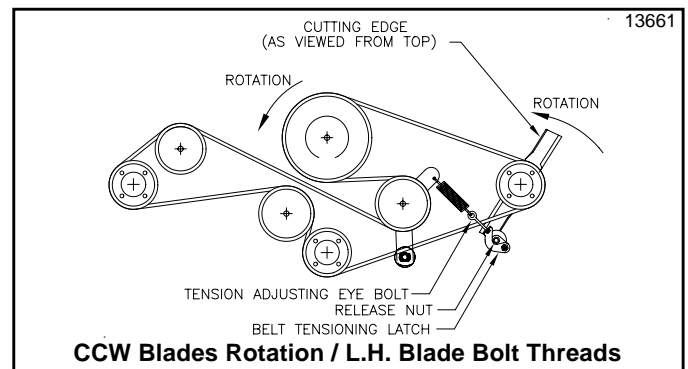
IMPORTANT: Always install blades with cutting edge facing direction of blade spindle rotation and with wing tips pointing up towards bottom of deck.

IMPORTANT: (AFM4216 ONLY) Loctite is not required if blade (#1) is removed without removing blade bar (#2). However, If blade bar (#2) is removed from spindle shaft (#3), then apply loctite 243 to external spindle shaft threads and to center bolt threads (#4).

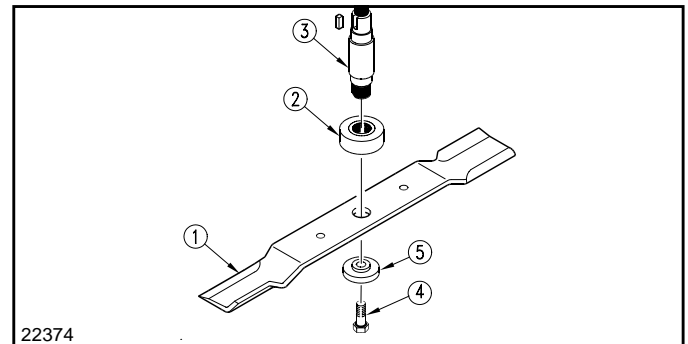
5. Reinstall blade (#1), blade washer (#5) and bolt (#4). Care should be taken when installing the blade bolt to not get it cross threaded and to know if the bolt is right hand or left hand. Do not exceed 55 ft.-lbs. of torque on bolt.
6. (Model AFM4216 Only.) Reinstall the two outside bolts. Tighten to correct torque listed in the *Torque Values Chart* in the “**Appendix**” section on page 43.



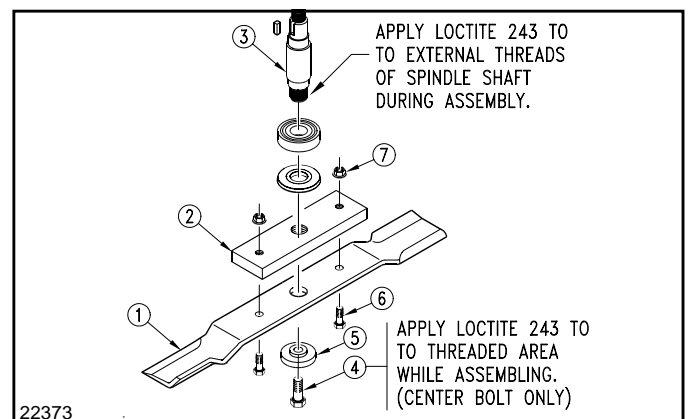
Top View of Left Hand Deck Belt Drive
Figure 5-2



Top View of Center & Right Hand Deck Belt Drive
Figure 5-3



Model 4214 Blade Removal
Figure 5-4



Model 4216 Blade & Blade Bar Removal
Figure 5-5

Section 5: Maintenance and Lubrication

Blade Sharpening

CAUTION

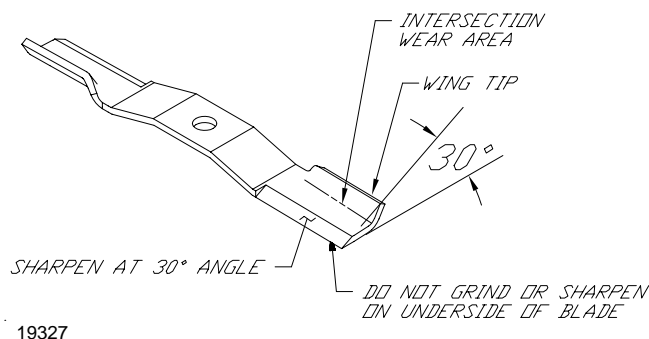
ALWAYS wear eye protection and gloves when sharpening a blade.

NOTE: Take care not to remove any more material than necessary when sharpening the blades.

1. A blade should be replaced or sharpened if it is dull or nicked.
2. Clean blade washer and blade mounting surface before installing a new blade. Also clean the old blade if you plan to sharpen it for reuse.

Refer to Figure 5-6:

3. Maintain sharpness by grinding only the top of the cutting edge at the same bevel as the original edge.

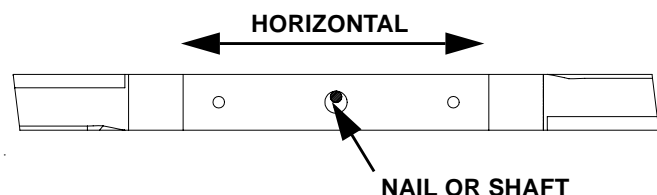


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**Blade Sharpening
Figure 5-6**

Refer to Figure 5-7:

4. Check blade balance by positioning the blade horizontally on a nail or shaft through the center hole. If either end of the blade rotates downward, grind (remove) metal on that end until the blade will balance. The blade is properly balanced when neither end drops. Balance of a blade is generally maintained by removing an equal amount of material from each end of the blade when sharpening.



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**Blade Balancing
Figure 5-7**

Blade Options:

- Low Lift Blades - For use in sandy soils
- Mulching Blades - For leaf mulching

V-Belt Installation

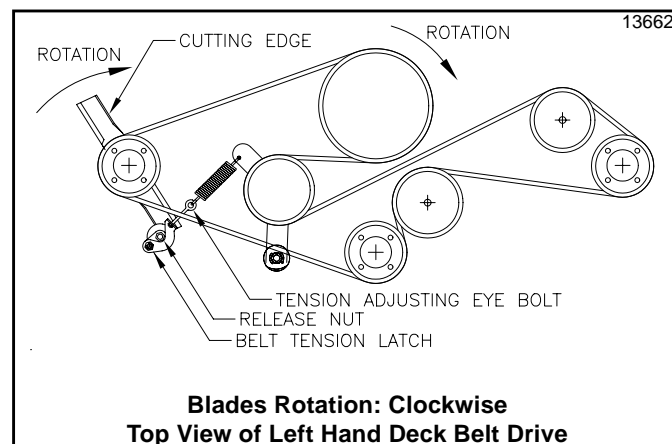
CAUTION

The belt drive system is under spring tension. Use care to avoid bodily harm removing and installing belt!

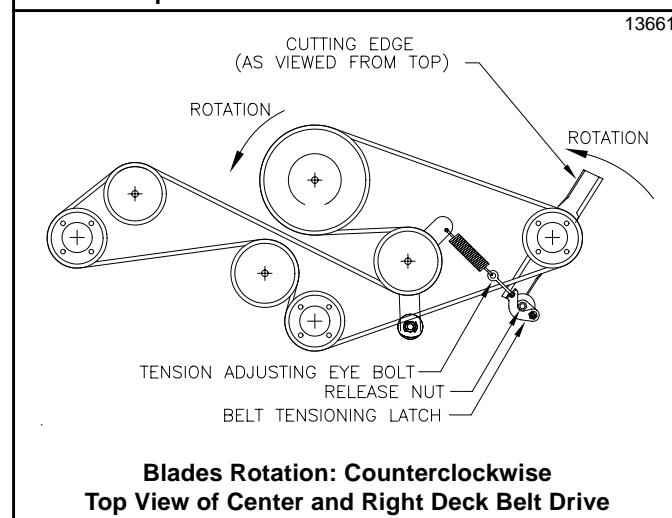
Refer to Figure 5-8:

These illustrations are also on the labels located on the top of the mower decks.

1. Remove right hand and left hand belt covers.
2. Disengage belt tensioning latch by turning release nut with a 3/4" wrench.
3. Replace old belt with a new Land Pride belt making sure the new belt is positioned correctly in all the pulley grooves.
4. Engage belt tensioning latch by turning the release nut with a 3/4" wrench.
5. Check for correct belt tension. Refer to "Belt Tension" on page 22.
6. Reinstall all belt covers and secure with hardware.



**Blades Rotation: Clockwise
Top View of Left Hand Deck Belt Drive**



**Blades Rotation: Counterclockwise
Top View of Center and Right Deck Belt Drive**

**Belt Placement
Figure 5-8**

Section 5: Maintenance and Lubrication

Driveline Protection



CAUTION

Engage parking brake, disengage PTO, shut off tractor, and remove key before working on or around the driveline and/or slip clutch.



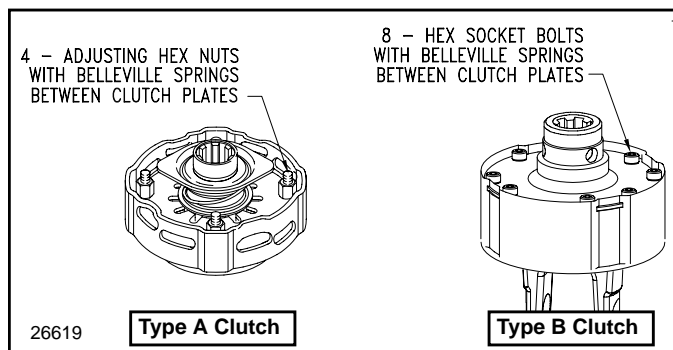
CAUTION

Slip clutches that have been in use or have been slipped for only two or three seconds during run-in may be too hot to touch. Allow a hot clutch to cool before working on it.

Drive components are protected from shock loads with a friction slip clutch. The clutch must be capable of slippage during operation to protect the gearbox, driveline and other drive train parts.

Friction clutches should be “run-in” prior to initial operation and after long periods of inactivity to remove any oxidation that may have accumulated on the friction surfaces. Repeat “run-in” instructions at the beginning of each season and when moisture and/or condensation seizes the inner friction plates.

Refer to Figure 5-9 to determine which friction clutch your mower has. Follow “run-in” instructions on the following pages for your specific clutch type.



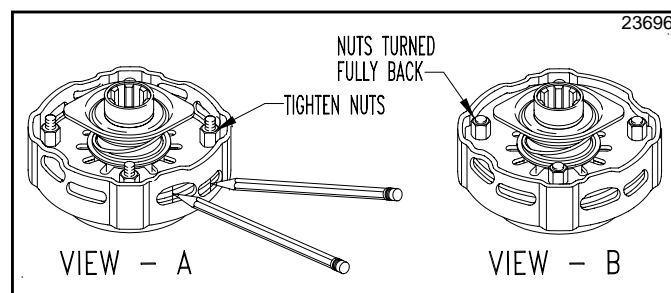
Clutch Types
Figure 5-9

Type A Clutches

Clutch Run-In

Refer to Figure 5-10 (View - A):

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.
2. Tighten all 4 nuts uniformly until spring load is low enough that the clutch slips freely with PTO engaged.



Type C Clutch Run-In
Figure 5-10

3. Make sure the area is clear of all bystanders and machine is safe to operate.
4. Start tractor and engage PTO for 2-3 seconds to permit slippage of clutch surfaces. Disengage PTO, then re-engage a second time for 2-3 seconds. Disengage PTO, shut off tractor and remove key. Wait for all components to stop before dismantling from tractor.
5. Inspect clutch and ensure that the scribed markings made on the clutch plates have changed position. Slippage has not occurred if any two marks on the friction disk and plate are still aligned. A clutch that has not slipped must be disassembled to separate the friction disk plates. See “Clutch Disassembly, Inspection & Assembly” below.

Refer to Figure 5-10 (View - B):

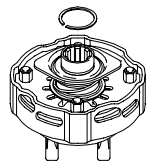
6. If no two marks on the friction disk and plate are still aligned, Turn all 4 nuts fully back.
7. Allow clutch to cool to ambient temperature before operating again. Clutch is now ready for use.
8. The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage.

Clutch Disassembly, Inspection & Assembly

If clutch run-in procedure above indicates that one or more of the friction disks did not slip, then the clutch must be disassembled into separate friction disks.

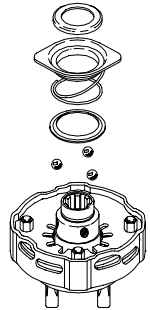
IMPORTANT: Before proceeding, secure clutch firmly in a vise or other clamping device to prevent injury.

Section 5: Maintenance and Lubrication

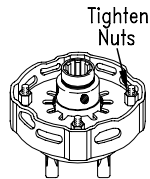


2-Plate Disassembly

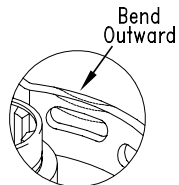
- ◀ **Step 1**
Remove snap ring.



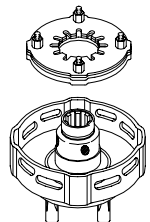
- ◀ **Step 2**
Remove backup ring, lock collar, compression spring, bottom backup ring, and balls.



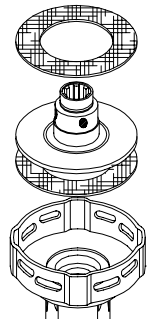
- ◀ **Step 3**
Tighten the four hex nuts uniformly until the clutch pack and hub are loose.



- ◀ **Step 4**
Bend all four retaining lugs out on edge of clutch housing.

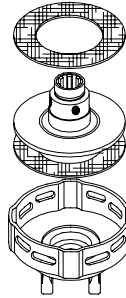


- ◀ **Step 5**
Remove thrust plate with Belleville Springs and lug rings to access friction discs and hub for inspection or service.



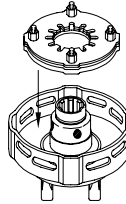
- ◀ **Step 6**
Inspect friction discs and hub.

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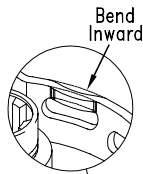


2-Plate Assembly

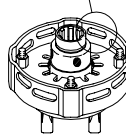
- ◀ **Step 1**
Place hub and friction discs into the housing.



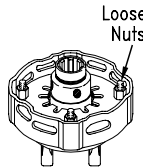
- ◀ **Step 2**
Compress Belleville Springs to the pressure plate by tightening the four hex nuts and then placing the assembly into the clutch housing.



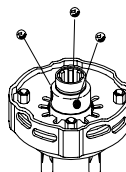
- ◀ **Step 3**
Bend retaining lugs inward over the Belleville Spring edges to secure the spring before backing the four hex nuts off.



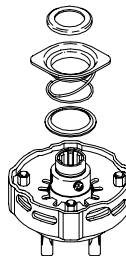
- ◀ **Step 4**
With lugs bent in, loosen the four hex nuts completely to the end of the threaded studs.



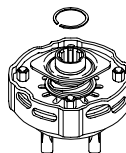
- ◀ **Step 5**
Insert greased balls.



- ◀ **Step 6**
Install bottom backup ring, compression spring, lock collar, and top backup ring.



- ◀ **Step 7**
Install snap ring.



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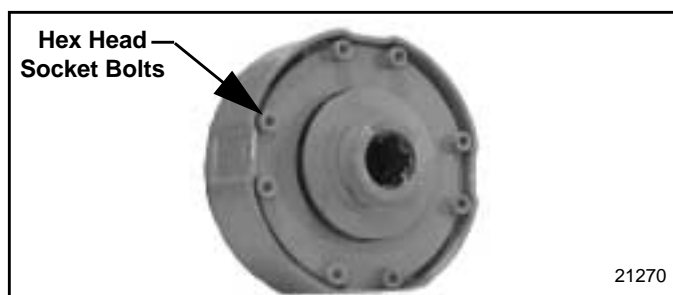
Section 5: Maintenance and Lubrication

Type B Clutch

Clutch Run-In

Refer to Figure 5-11:

1. Loosen counterclockwise all 8 hex head socket bolts uniformly 6 full turns.
2. Cycle clutch on and off 5 or 6 times (15 seconds on and 15 seconds off) with the engine operating at half throttle. Disengage driveline, shut off tractor and remove key. Wait for all components to stop before dismounting from tractor.
3. Tighten hex head socket bolts fully back. Clutch is ready for use
4. The clutch should be checked during the first hour of cutting and periodically each week.



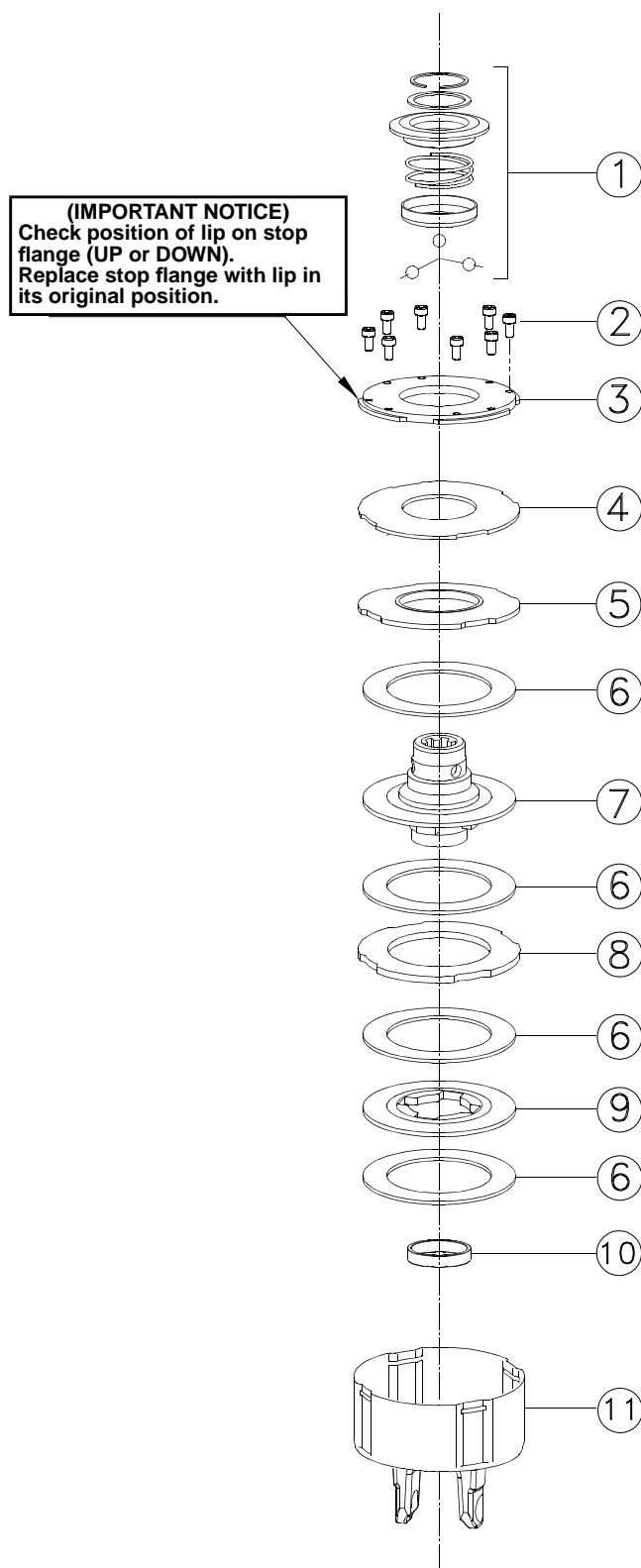
Type B Clutch Run-In
Figure 5-11

Disassembly and Assembly

Refer to Figure 5-12:

If the clutch run-in procedure indicated that one or more of the friction disks did not slip, then the clutch must be disassembled to separate the friction disks.

1. Rotate 8 hex head socket bolts (#2) all the way out to free stop flange (#3).
2. Rotate stop flange (#3) and remove from housing (#11).
3. Remove the following inner components:
 - a. Spring kit (#4)
 - b. Pressure flange (#5)
 - c. 1st Friction Disc (#6)
 - d. Hub with flange and pull collar (#7 & #1)
 - e. 2nd Friction disc (#6)
 - f. Intermediate flange (#8)
 - g. 3rd Friction disc (#6)
 - h. Hub disc (#9)
 - i. 4th Friction disc (#6)
 - j. Bearing (#10)
4. Inspect all components and replace to their original position. Make certain stop flange (#3) is replaced with its flanges down as shown.
5. Fully tighten all 8 hex head socket bolts (#2).



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Type B Clutch Assembly
Figure 5-12

Section 5: Maintenance and Lubrication**Storage**

It is good practice to clean off any dirt and grease that may have accumulated on the mower and moving parts before storing the mower for a long period and at the end of a working season.

1. Clean off any dirt and grease that may have accumulated on the mower and moving parts. Scrape off compacted dirt from the bottom of the deck and then wash surface thoroughly with a garden hose. A coating of oil may also be applied to the lower deck area to minimize oxidation.
2. Check blades for wear and replace or sharpen if necessary. Refer to "Blade Sharpening" on page 26.
3. Inspect mower for loose, damaged or worn parts and adjust or replace as needed.
4. Lubricate as noted in "Lubrication Points" starting on page 31.
5. Release spring tension from drive belt. Refer to "Blade Removal And Installation" on page 25.
6. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Aerosol Land Pride touch-up paint. They are also available in touch-up bottles with brush, quarts and gallon sizes by adding TU, QT or GL to the end of the Aerosol part number.

Land Pride Aerosol Touch-up Paint

Part No.	Part Description
821-011C	PAINT LP BEIGE AEROSOL SPRAY CAN
821-002C	PAINT LP BLACK AEROSOL SPRAY CAN
821-054C	PAINT MEDIUM RED AEROSOL SPRAY CAN
821-058C	PAINT GREEN AEROSOL SPRAY CAN
821-066C	PAINT ORANGE AEROSOL SPRAY CAN
821-067C	PAINT BLUE AEROSOL SPRAY CAN

7. Store mower in a clean, dry place.

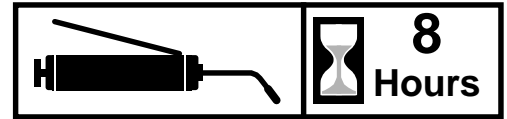
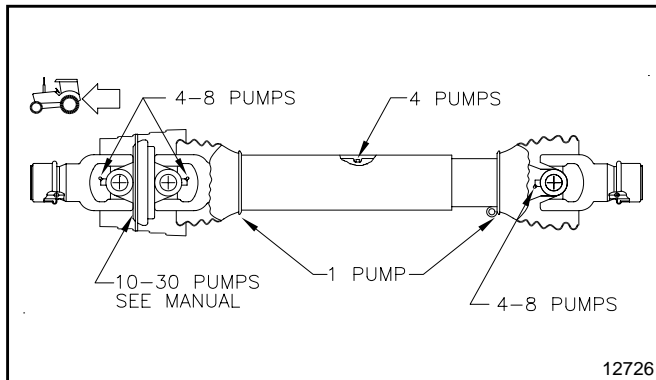
Tires With Air Pressure

Tire Sealant: Heavy Duty tire sealant has been added in air tires to help reduce air loss from punctures due to nails/thorns etc. See tire sidewall for optimum tire pressure.

NOTE: Under inflated tires can roll off of rim. Maintaining air pressure within 5 PSI of maximum tire pressure reduces the risk of tires rolling off of rim.

Section 5: Maintenance and Lubrication

Lubrication Points

Lubrication
Legend
 Intervals in hours
at which lubrication
is required


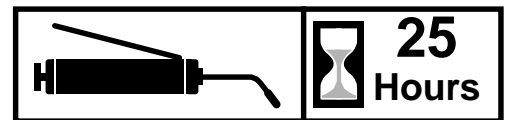
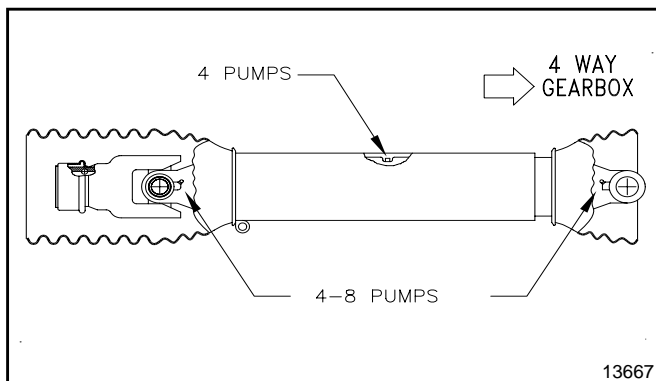
Driveline Constant Velocity Shaft

Type of Lubrication: Multi-purpose Grease

Quantity = See drawing

IMPORTANT: Extensive lubrication must be performed every 8 hours of operation to extend the life of the constant velocity joint!

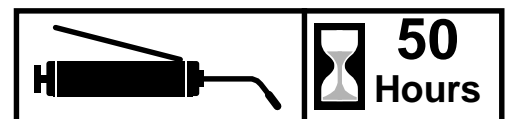
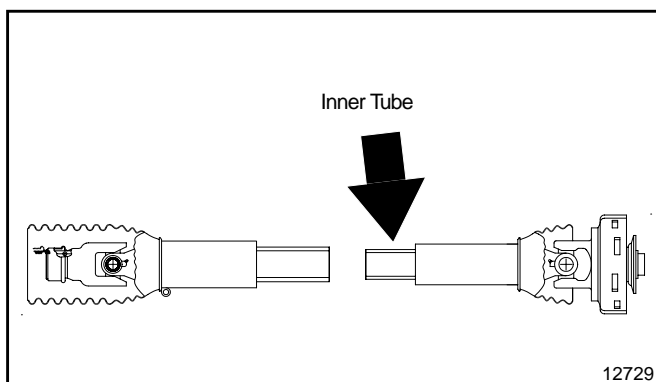
- Grease constant velocity joint in a straight position to force grease through its passages and into the cavity. Grease should be visible around ball joints.
- Grease fittings in the outer telescoping member, u-joints and driveline shields every 8 hours of operation to prevent premature break down.



Driveline Shafts

Type of Lubrication: Multi-purpose Grease

Quantity = See drawing

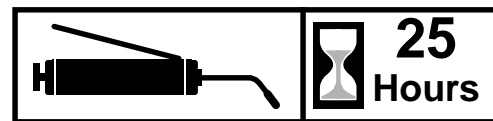
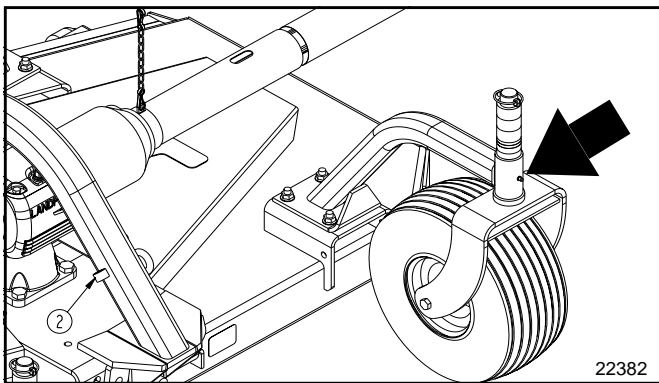


Inner Tube of Driveline

Type of Lubrication: Wheel Bearing Grease

Clean and coat all inner tubes of the Drivelines with a light film of grease and then reassemble.

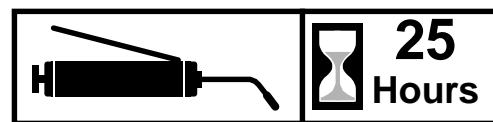
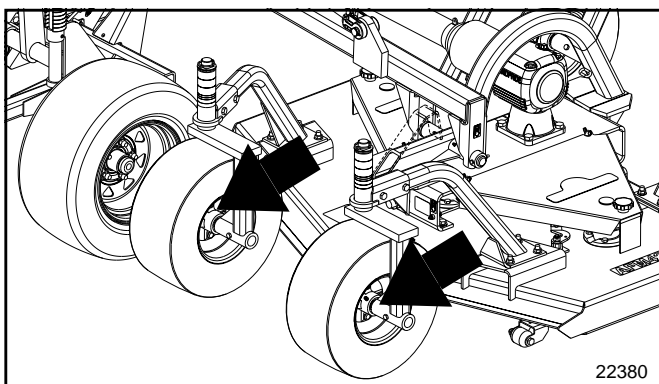
Section 5: Maintenance and Lubrication



Wheel Support Bushings

Type of Lubrication: Multi-purpose Grease

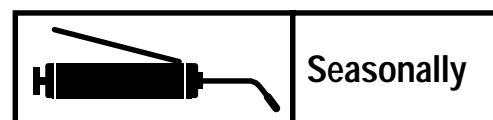
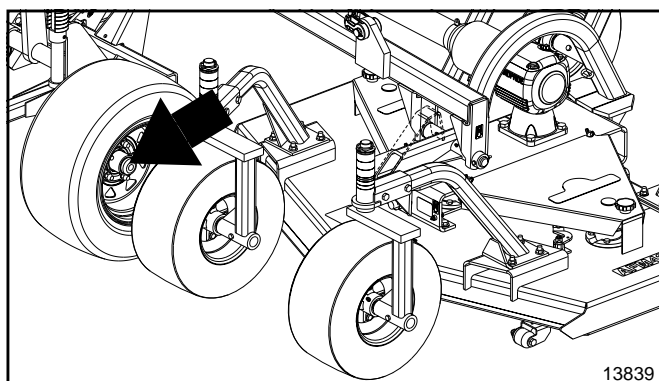
Quantity = As required



Wheel Bushings (Gauge Wheels)

Type of Lubrication: Multi-purpose Grease

Quantity = As required

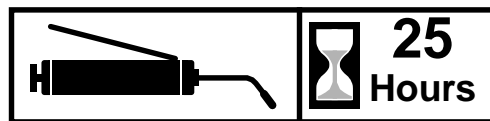
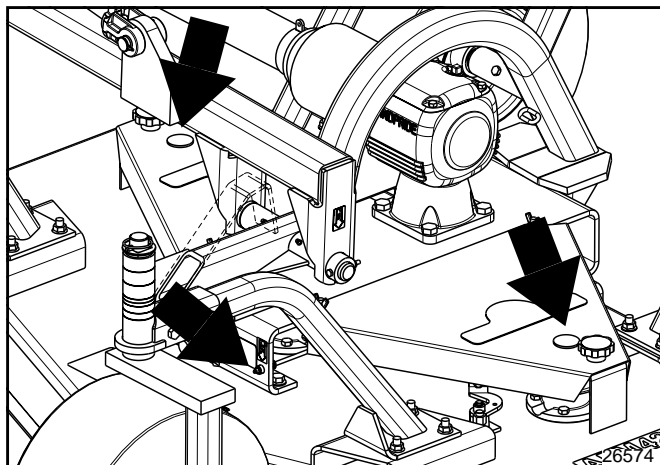


Wheel Bushings (Transport Hubs)

Type of Lubrication: Wheel Bearing Grease

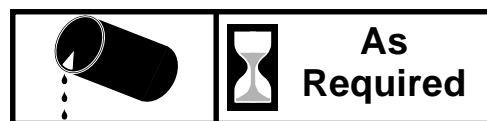
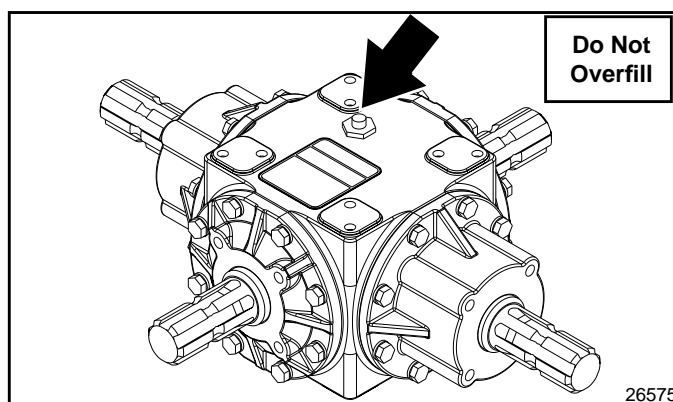
Quantity = As required

Section 5: Maintenance and Lubrication

**Blade Spindle Bearings**

Type of Lubrication: Multi-purpose Grease

Quantity = As required

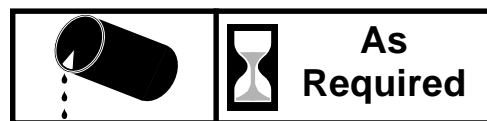
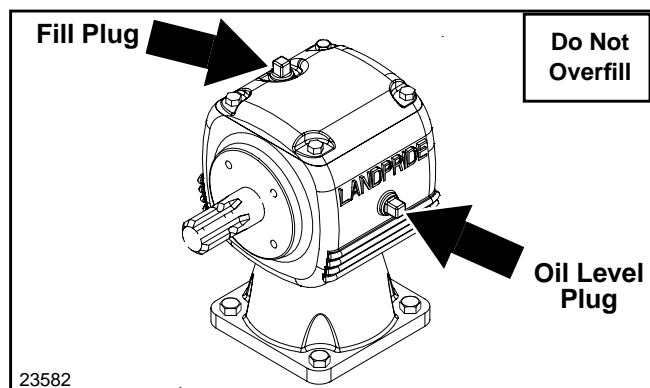
**4-Way Gearbox**

IMPORTANT: Do not overfill gearbox with oil! The gearbox should be level and cool before checking. An unlevel gearbox or one with hot oil will not show correct oil level on the dipstick.

Unscrew top plug in gearbox to remove dipstick. Wipe oil from dipstick and screw it back in without tightening. Unscrew dipstick and check oil level mark. If low, fill through top plug hole in gearbox with EP 80-90W oil until oil reaches full mark on the dipstick. Reinstall vent plug with dipstick and tighten. Take your gearbox to a Land Pride dealer if it requires service.

Type of Lubrication: Gear Lube EP 80-90W

Quantity = Fill until oil reaches full mark on dipstick.

**Mower Deck Gearbox**

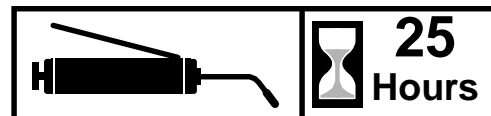
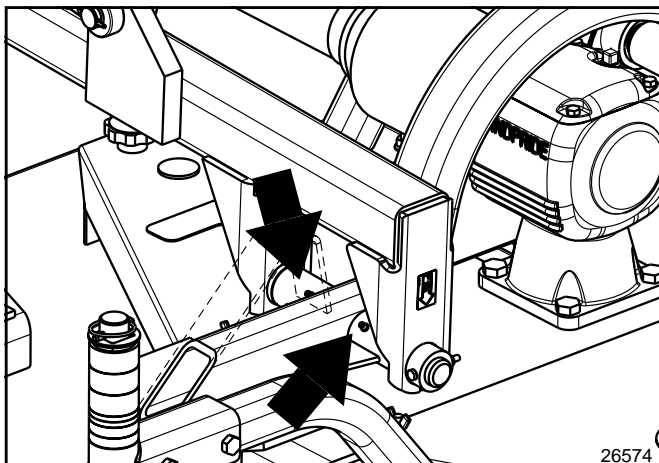
IMPORTANT: Do not overfill gearbox with oil! The gearbox should be level and cool before checking. An unlevel gearbox or one with hot oil will not show correct oil level.

Remove side oil level plug. Oil should reach bottom of plug hole. If low, fill through top plug hole in gearbox with EP 80-90W oil until oil flows from level plug hole. Reinstall plugs and retighten. Take your gearbox to a Land Pride dealer if it requires service.

Type of Lubrication: Gear Lube EP 80-90W

Quantity = Fill until oil reaches bottom of oil level plug hole.

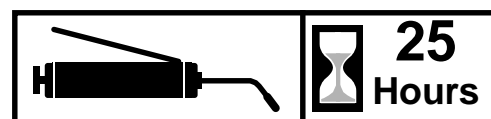
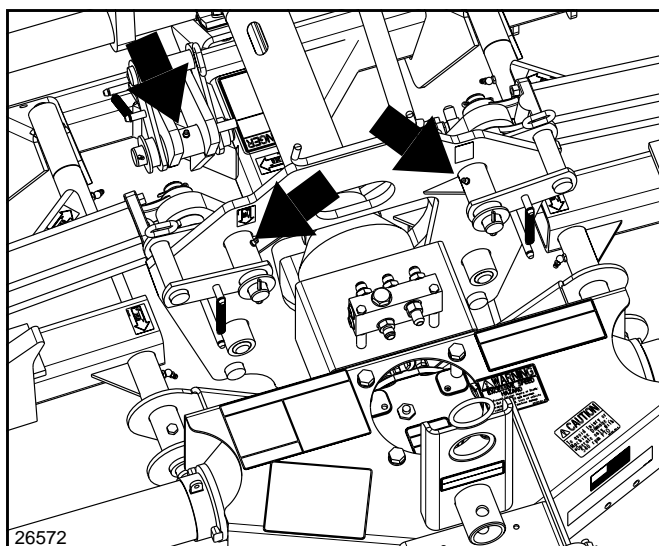
Section 5: Maintenance and Lubrication



Tool Bar to Deck Pivot Pin

Type of Lubrication: Multi-purpose Grease

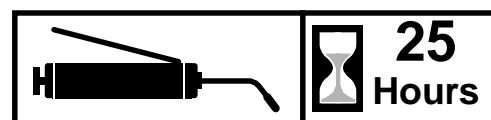
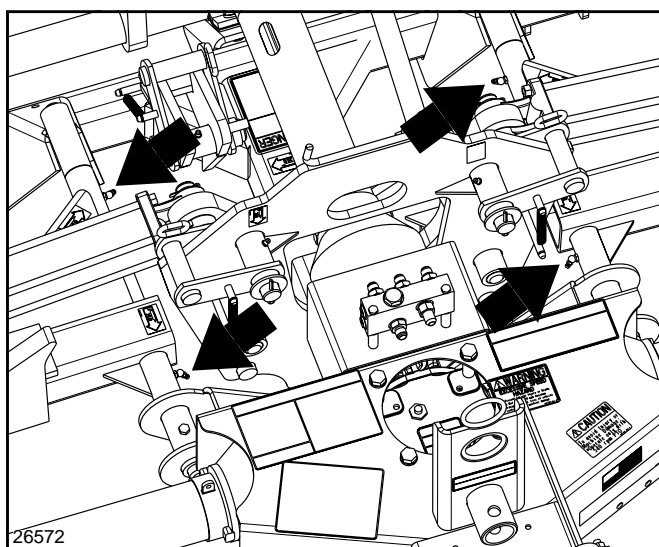
Quantity = As required



Transport Locks

Type of Lubrication: Multi-purpose Grease

Quantity = As required

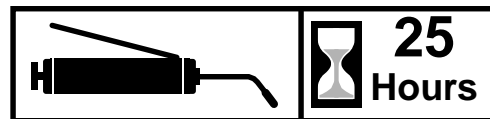
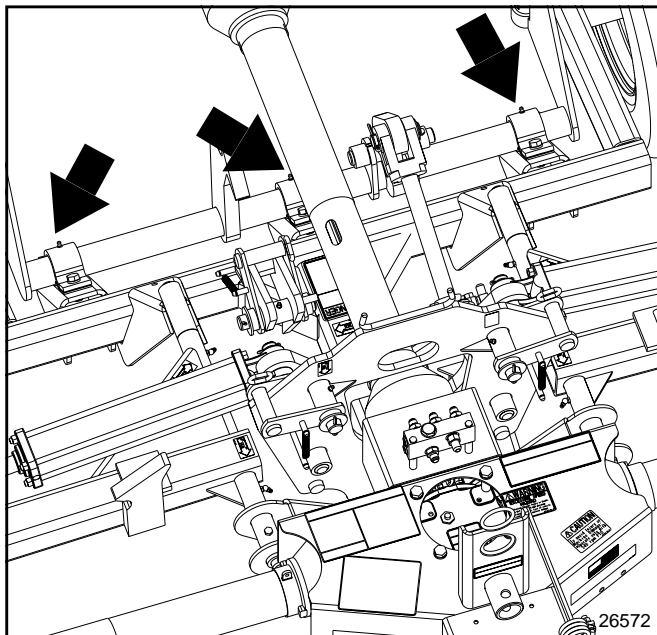


Wing Deck Pivot Bushings

Type of Lubrication: Multi-purpose Grease

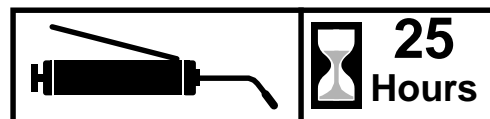
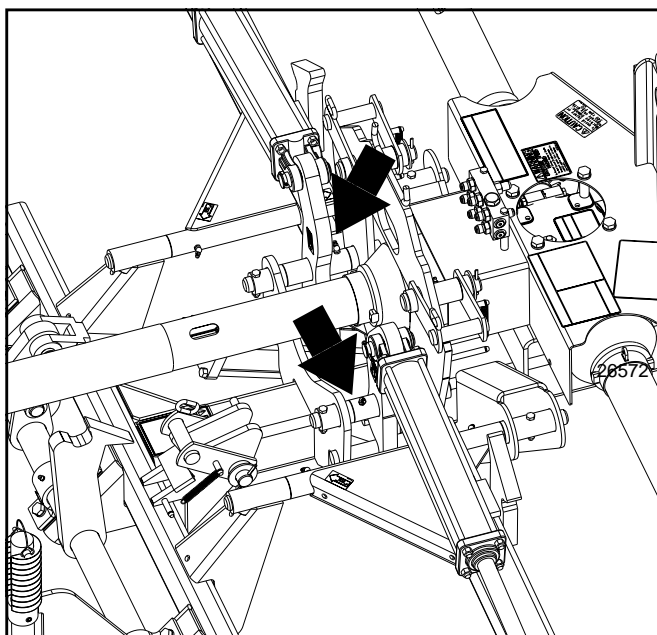
Quantity = As required

Section 5: Maintenance and Lubrication

**Rear Deck Pivot Half Clamps**

Type of Lubrication: Multi-purpose Grease

Quantity = As required

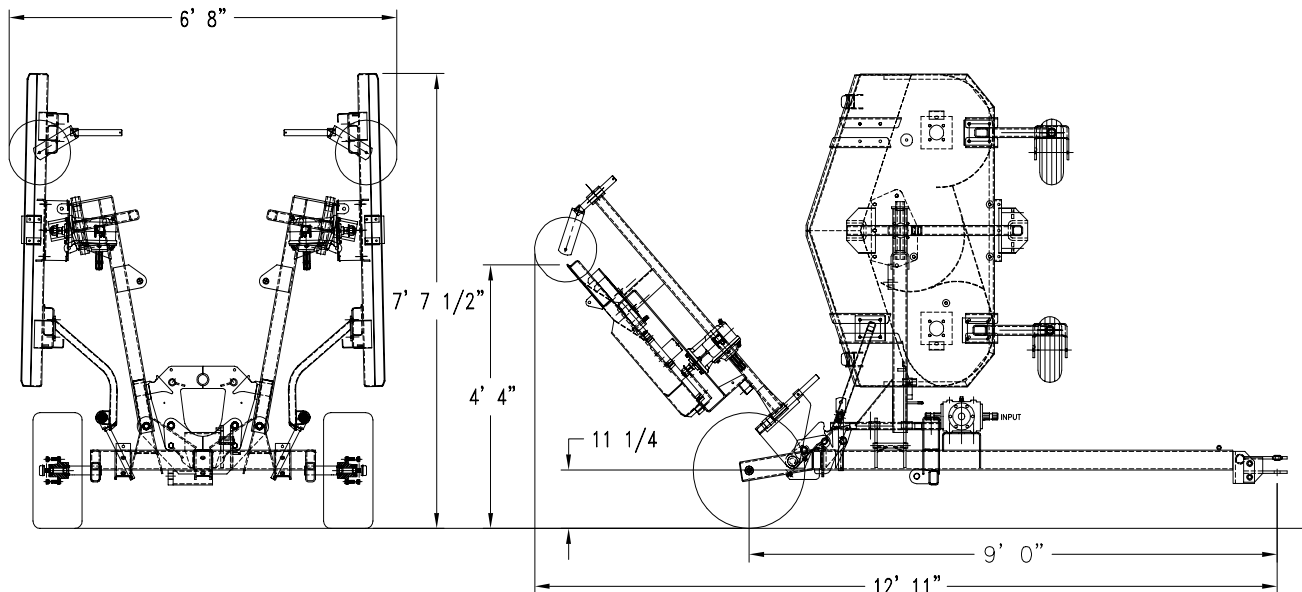
**Wing Flex Pivot Lugs**

Type of Lubrication: Multi-purpose Grease

Quantity = As required

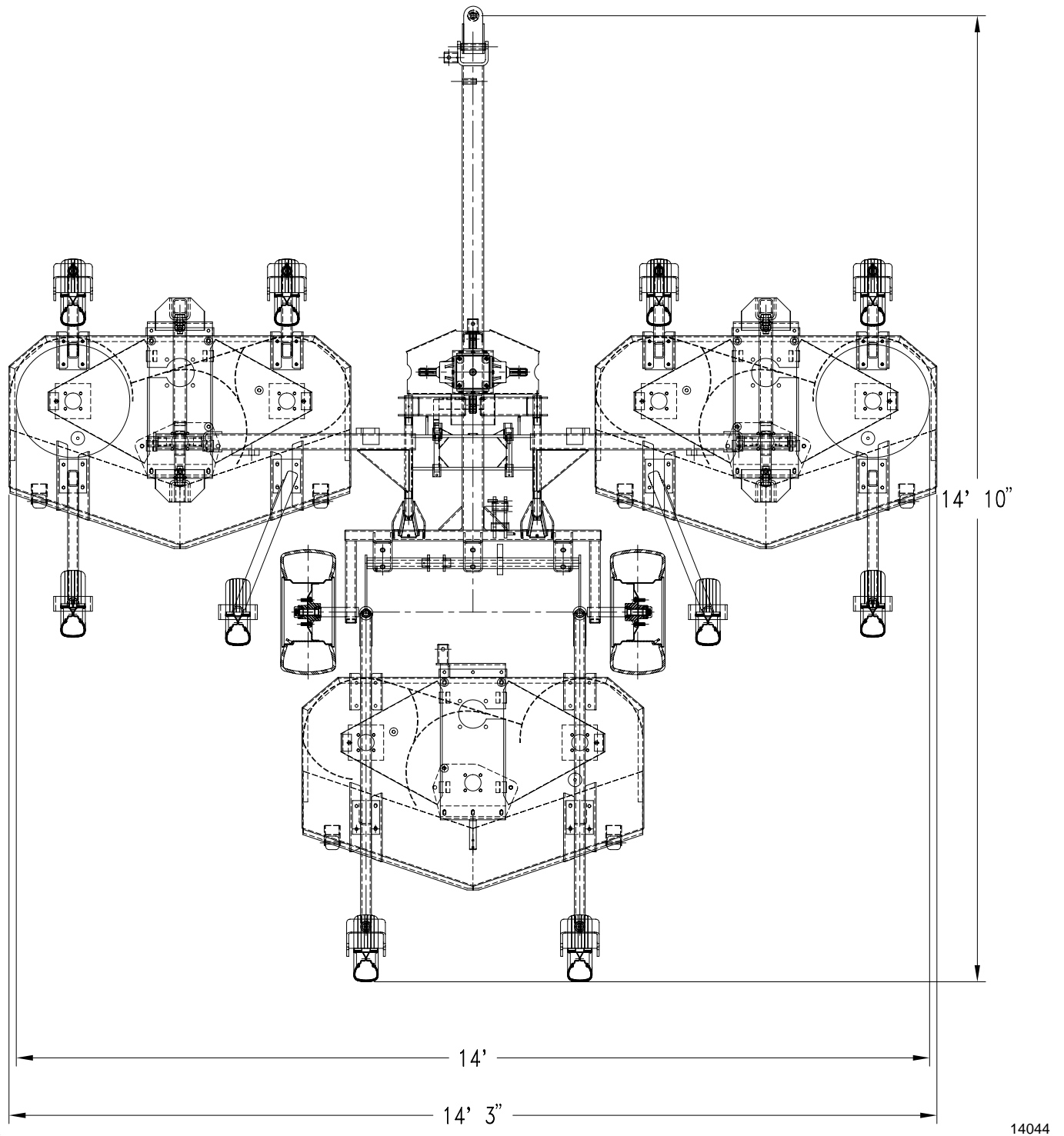
AFM4214 Series

Description	Specification / Capacity	Description	Specification / Capacity
Discharge Type	Rear		
Cutting Width	14'-0"	Blade Drive Belt	1 B-Section
Overall Width	14'-3"	Drive Belt Tension	Spring Loaded Idler with Overcenter Release
Transport Height	7'-7 1/2"	Blade Bearing	Sealed Ball Bearings
Transport Width	6' - 8"	Blades 3 Each Per Deck	Low Lift (5/16" x 2 1/2" x 20 29/32") Optional Blades: Medium Lift, High Lift & Mulching
Overall Length	14'-10" Mowing Position 12'-11" Transport Position	Blade Overlap	1 1/4"
Machine Weight	W/15" tires = 3,000 lbs. W/18" tires = 3,150 lbs.	Blade Spindle Speed	3,362 R.P.M.
Tractor Horsepower	Minimum 40 HP / Maximum 70 HP	Blade Tip Speed	18,396 F.P.M.
Hitch	Pull Type with Adjustable Clevis and Safety Tow Chain	Deck Tires	10 each, Air tires with Sealant 18 x 9.5 or 15 x 6.6
Tongue Support	2,200 lb. Capacity Screw Jack	Deck Wheel Spindles	1 1/4" w/Nylon Bushings
Gearbox Support	3/8" Steel Channel	Transport Tires	2 each, 23 x 10.5 with Sealant
Gearboxes	540 RPM (1)-Splitter & (3)-Wing	Transport Locks	Automatic with Pull Rope Release
Main Driveline (1)	Cat. IV Constant Velocity with Slip Clutch when wings are conventional	Wing Deck Flex	23 Degrees Left To Right 22 Degrees Front To Back
Deck Drivelines (3)	Cat. II with or without Slip Clutch	Center Deck Flex	10 Degrees Left To Right 22 Degrees Front To Back
Cutting Height	3/4" to 5 1/4" (In 1/4" increments)	Hydraulic Outlets	1 Set Required
Deck Size & Quantity	3 each / 60"	Deck Cylinders	Dual Acting
Deck Overlap	6"	Gauge Wheel Arms	1/4" Wall Square Tubing
Deck Thickness	3/16"	Turning Radius	Zero Turning Radius
Anti-Scalp Roller	Front Center and Outside Deck Corners	Mowing Capacity @ 2 mph @ 4 mph @ 6 mph	3.39 Acres Per Hour 6.78 Acres Per Hour 10.17 Acres Per Hour



Model 4214 Specification Drawing

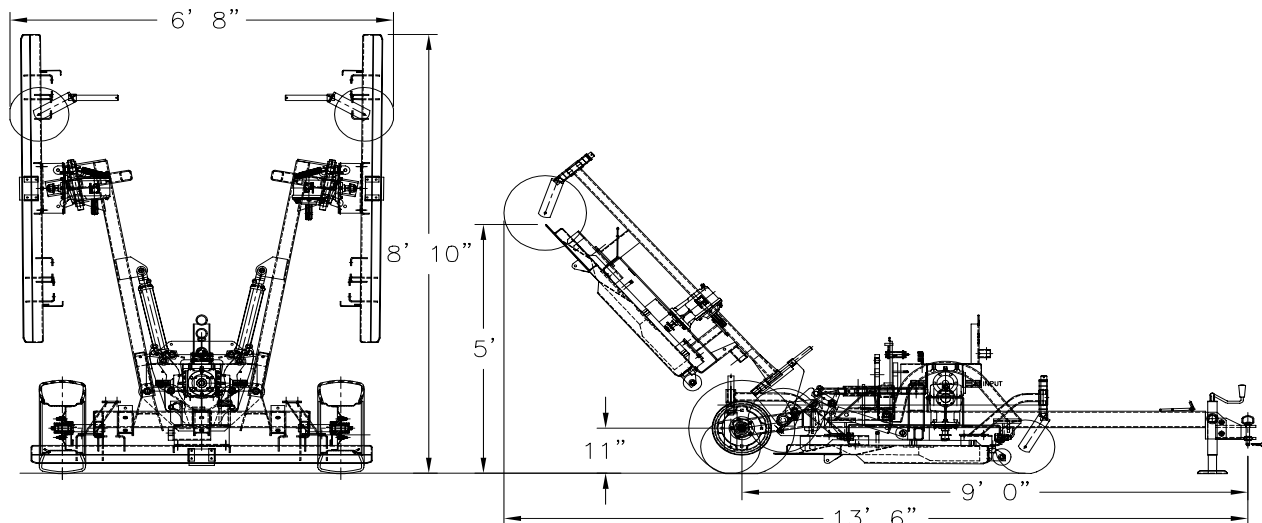
14043

Section 6: Specifications & Capacities**Model 4214 Specification Drawing**

Section 6: Specifications & Capacities

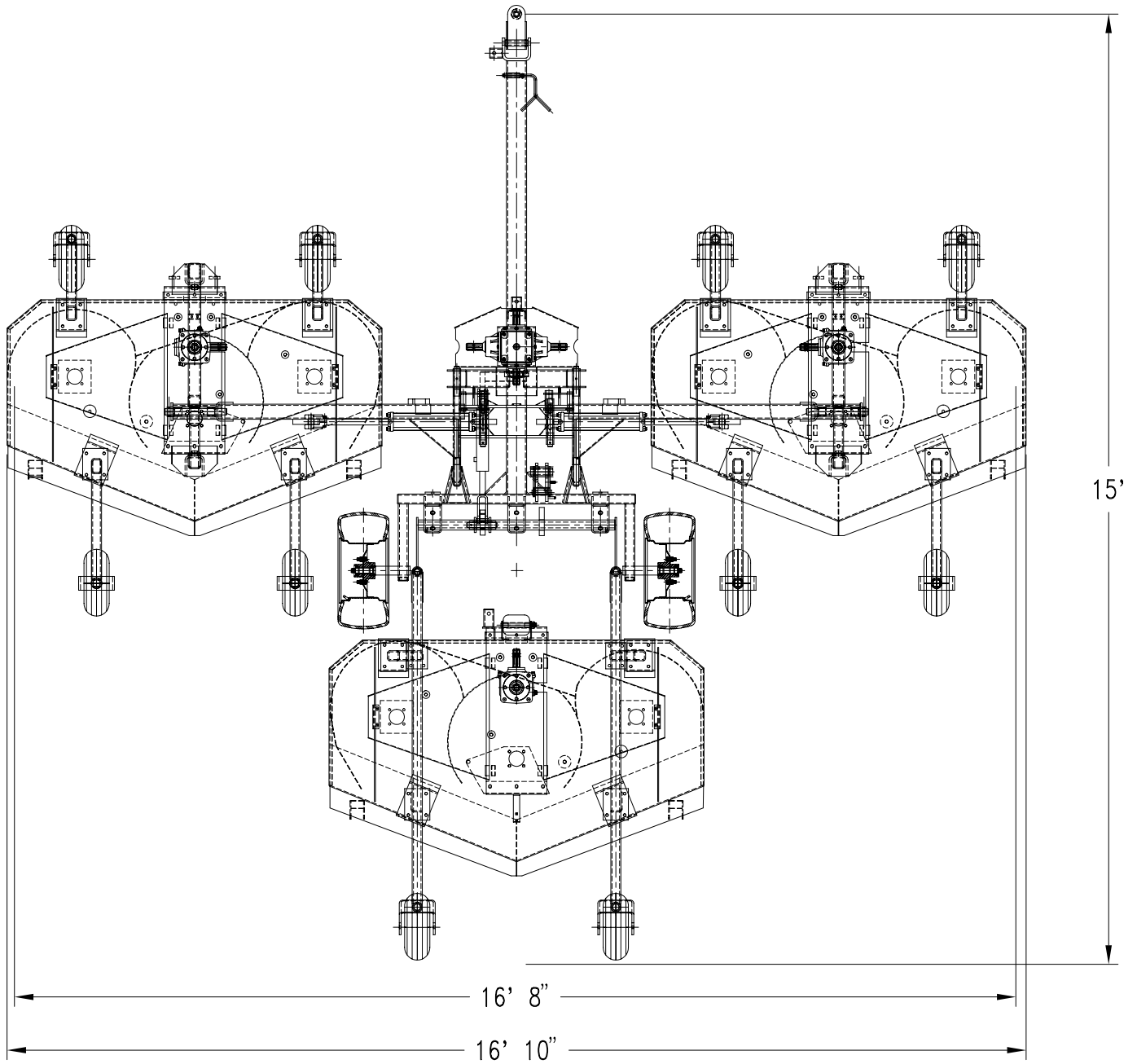
AFM4216 Series

Description	Specification / Capacity	Description	Specification / Capacity
Discharge Type	Rear		
Cutting Width	16' - 8"	Blade Drive Belt	1 B-Section
Overall Width	16' -10"	Drive Belt Tension	Spring Loaded Idler with Overcenter Release
Transport Height	8' -10"	Blade Bearing	Sealed Ball Bearings
Transport Width	6' - 8" With Lock Pins Installed	Blades 3 Each Per Deck	Low Lift (5/16" x 2 1/2" x 25") Optional Blades: Medium Lift, High Lift & Mulching
Overall Length	15'-0" Mowing Position 13'-4" Transport Position	Blade Overlap	1 1/4"
Machine Weight	W/15" tires = 3,315 lbs. W/18" tires = 3,465 lbs.	Blade Spindle Speed	2,302 R.P.M.
Tractor Horsepower	Minimum 40 HP / Maximum 70 HP	Blade Tip Speed	18,340 F.P.M.
Hitch	Pull Type with Adjustable Clevis and Safety Tow Chain	Deck Tires	10 each, Air tires with Sealant 18 x 9.5 or 15 x 6.6
Tongue Support	2,200 lb. Capacity Screw Jack	Deck Wheel Spindles	1 1/4" w/Nylon Bushings
Gearbox Support	3/8" Steel Channel	Transport Tires	2 each, 23 x 10.5 with Sealant
Gearboxes	540 RPM (1)-Splitter & (3)-Wing	Transport Locks	Automatic with Pull Rope Release
Main Driveline (1)	Cat. IV Constant Velocity with Slip Clutch when wings are conventional	Wing Deck Flex	23 Degrees Left To Right 22 Degrees Front To Back
Deck Drivelines (3)	Cat. II with or without Slip Clutch	Center Deck Flex	10 Degrees Left To Right 22 Degrees Front To Back
Cutting Height	3/4" to 5 1/4" (In 1/4" increments)	Hydraulic Outlets	1 Set Required
Deck Size & Quantity	3 each / 72"	Deck Cylinders	Dual Acting
Deck Overlap	8"	Gauge Wheel Arms	1/4" Wall Square Tubing
Deck Thickness	3/16"	Turning Radius	Zero Turning Radius
Anti-Scalp Roller	Front Center and Outside Deck Corners	Mowing Capacity @ 2 mph @ 4 mph @ 6 mph	4.0 Acres Per Hour 8.1 Acres Per Hour 12.1 Acres Per Hour



Model 4216 Specification Drawing

17853

Section 6: Specifications & Capacities**Model 4216 Specification Drawing**

13665


AFM4214 & AFM4216 All-Flex Grooming Mower

Features	Benefits
Counter rotation on left hand deck	Spreads grass clippings more evenly. Wing decks throw grass away from the rear deck. Rear deck doesn't get covered up nor does it get bogged down by cut grass.
Narrow 6'-8" transport width	Not much wider than most tractors, making for safer transport. Meets most city/county codes for transport width
6" Deck overlap (AFM4214) 8" Deck overlap (AFM4216)	Eliminates blade skips when turning. Tighter turns can be made. Allows for maximum amount of wing deck flex.
Sleek frame design, including single beam hitch and compact deck overlap	Design allows operator to make tighter turns without leaving windrows and skips. The AFM virtually becomes a zero turn mower.
Automatic transport wing locks	When wings are raised in the full transport position, the wings lock in place, no need to get off the tractor to lock. Pull rope from tractor seat to unlock.
23" Transport tires with tapered bearings	23" Transport tires offer smooth roading and less grass compaction. Allows grass to stand up. Tapered roller bearings offer longevity.
Removable transportation tire spindles	Allows a spindle to be replaced by simply removing two bolts.
Back wheels on side decks even with transportation tires	Allows tighter turns without skips.
Rigid rear side deck tires	Rigid wheel yokes holds hills and slopes better. Safer unit than the competition.
Large deck flotation tires with sealant	Optional 15" tires for great flotation or 18" tires for even greater flotation. The larger the tire the less compaction in pounds per square inch allowing grass to stand up. Sealant in the tires minimizes flats.
1/4" Gauge wheel arms	Gives the cutter gauge wheel arms a great deal of "hidden" strength.
Low pivot points on deck	The lower the pivot points are to the ground, the more side to side swing, allowing for excellent flotation from each deck.
Deflectors built into mower decks	Safety features meet ANSI standards. Many competitors use chains for protection. Once chains are removed the unit may not meet ANSI specifications.
Rear discharge	Even dispersal, discharged items are always aimed downward. No rear chains are needed, which tend to clump damp grass.
Cat. 4 CV main driveline	Constant velocity main driveline allows for tighter turns without harming U-joints in driveline. Includes slip clutch option when wings are conventional.
Cat. 2 wing drivelines	Reduces start-up torque that is put on the driveline, gearbox and gearbox support. Includes slip clutch option when main driveline is without a slip clutch.
Slip clutch protection	Guards against premature gearbox failure. Protects mower deck spindles.
Heavy gearbox mounts on center and side mower decks	Handles start up torque.
Gearbox HP Rating	40 - 70 HP
Gearbox warranty	5 years on parts and labor. Demonstrates our confidence in the gearbox's quality and lasting performance.
Easy to grease blade spindles	No guards to remove for routine greasing of blade spindles.
Middle spindle sits towards the back of the mower deck.	Uses less horsepower and allows material to escape the mower deck easier. The discharge of material is more even. Design eliminates windrowing.
Spring loaded idlers	Applies constant tension to belt to run efficiently.
Easy belt tension release	Easily release belt tension for changing belt or for winter storage.
High blade tip speed	(AFM4214 = 18,396 fpm & AFM4216 = 18,340 fpm) Lifts grass up for a clean cut and efficient discharge of material. Tip rates as high or higher than the competition.
Choice of Blade (Low lift standard) Others available thru parts dept.	Low Lift - Highly recommended in sandy soils where lifting isn't crucial. Disturbs the soil very little, allowing blades to wear longer. Medium Lift - Medium suction for lifting grass. Requires less HP than high lift. High Lift - Greatest suction for lifting grass before cutting. Can take higher HP in tall dense grass. Not recommended in sandy soils. Mulching - Perfect for leaf mulching.

Section 8: Troubleshooting







Problem	Cause	Solution
Oil seal leaking	Gearbox overfilled	Drain to level fill hole
	Seals damaged	Replace seals
	Grass or wire wrapped on shaft in seal area	Clean off wrapped material and check seal areas daily
Driveline yoke or cross failing	Shock load	Avoid hitting solid objects
	Bottoming out	Shorten driveline profiles
	Front constant velocity driveline mounted wrong	Be sure constant velocity joint is to tractor PTO output shaft
	Folding mower with drive engaged	Never fold mower decks with PTO engaged
	Needs lubrication	Lubricate every 25 hours
Bent driveline (NOTE: driveline should be repaired or replaced if bent)	Contacting drawbar	Reposition drawbar
	Bottoming out	Shorten driveline profiles
Driveline telescoping profile failing	Shock load	Avoid hitting solid objects
Driveline telescoping profile wearing	Needs lubrication	Lubricate every 50 hours
Unable to turn sharply with mower engaged	Front constant velocity driveline mounted wrong	Be sure constant velocity joint is attached to tractor PTO output shaft
Blades wearing excessively	Cutting on sandy ground	Raise cutting height. Change to low lift blades
	Contacting ground frequently	Raise cutting height
Blades breaking	Hitting solid objects	Avoid solid objects
Excessive vibration	Driveline bent	Replace bent drivelines
	Blade broken or bent	Replace blade
	Cross not centered with yoke	Disassemble and inspect for incorrectly located needles or damaged bearing cap
	Debris in sheaves or on mower deck	Remove belt guard shield and clean debris from belt area and sheaves
	Sheaves damaged or out of alignment	Replace sheaves or align
	Drive belt damaged	Replace drive belt - check for belt contacting deck component.
	Inadequate clearance between belt guard shields & belt	Remove belt guard shields & clean debris from belt area & sheaves

Section 8: Troubleshooting

Problem	Cause	Solution
Discharge openings plugged	Belt not installed correctly	Check installation of belt
	Grass too wet	Wait until grass dries
	Grass too tall	Raise cutting height of mower and cut grass twice
	RPM of tractor too low	Mow at full throttle (540 PTO rpm) Check PTO speed & tractor engine
	Ground speed too fast	Shift transmission to a lower gear
 CAUTION Do not try to clean discharge opening when mower is running. Bodily harm may occur.		
Belt slipping	Plugged grooming mower	Unplug and clean mower deck
	Debris in sheave	Remove belt guard shields and clean sheaves
	Low belt spring tension	Retighten spring take-up bolt
	Worn belt	Replace belt
Patches of uncut grass	RPM of tractor too low	Mow at full throttle (540 PTO rpm). Check PTO speed & tractor engine.
	Ground speed too fast	Shift transmission to a lower gear
	Blade damaged or dull	Sharpen & balance or replace blade
	Blade rotation wrong	Install correct rotation blade
Gearbox noisy	Low lubricant level	Check lubricant level
Blades scalping grass	Cutting too low	Raise cutting height by adjusting wheels
	Ridges in terrain	Change mowing pattern
	Fast turning speed	Reduce speed on turns
Uneven cut	Ground speed too fast	Shift to a lower gear
	Mower not level	Level mower
	Dull blades	Sharpen blades & balance or replace
Tractor loaded down by mower	RPM of engine too low	Mow at tractor's rated PTO RPM (540 PTO RPM)
	Ground speed too fast	Shift to a lower gear
	Debris wrapped around mower spindles or blades	Clean mower
	Tractor PTO horse power rating too low	Raise cutting height of the mower and cut the grass twice. Shift to a lower gear. Use a tractor with more horsepower
	Blades lift too high	Change to lower lift blades if they will cut the grass satisfactorily

Section 9: Appendix

Torque Values Chart

Bolt Size (Inches)	Bolt Head Identification						Bolt Size (Metric)	Bolt Head Identification					
													
	Grade 2		Grade 5		Grade 8			Class 5.8		Class 8.8		Class 10.9	
in-tpi ¹	N-m ²	ft-lb ³	N-m	ft-lb	N-m	ft-lb	mm x pitch ⁴	N-m	ft-lb	N-m	ft-lb	N-m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4" - 28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16" - 18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16" - 24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8" - 16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8" - 24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16" - 14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16" - 20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2" - 13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2" - 20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16" - 12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16" - 18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8" - 11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8" - 18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4" - 10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4" - 16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8" - 9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8" - 14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1" - 8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1" - 12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1-1/8" - 7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1 1/8" - 12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1 1/4" - 7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1 1/4" - 12	750	555	1680	1240	2730	2010	¹ in-tpi = nominal thread diameter in inches-threads per inch ² N-m = newton-meters ³ ft-lb= foot pounds ⁴ mm x pitch = nominal thread diameter in millimeters x thread pitch						
1 3/8" - 6	890	655	1990	1470	3230	2380							
1 3/8" - 12	1010	745	2270	1670	3680	2710							
1 1/2" - 6	1180	870	2640	1950	4290	3160							
1 1/2" - 12	1330	980	2970	2190	4820	3560							

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.

Additional Torque Values

Blade Bolt 1/2"-20 UNF Gr 8 Do not exceed 55 ft-lbs.

Tire Inflation Chart

Tire Size	Inflation PSI
23 x 10.50 - 12 x 4-Ply	20
15 x 6.00 - 6 x 4-Ply	28
18 x 9.50 - 8 x 4-Ply	28

Section 9: Appendix

Notes

Section 9: Appendix

Warranty

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Driveline: One year Parts and Labor.

Gearbox: 5 years on Parts and Labor.

Hydraulic Cylinder: One year Parts and Labor.

Hoses and seals are considered wear items.

Belts, Blades & Friction Discs in Slip-Clutches: Considered wear items.

Tires: Considered wear items.

This Warranty is limited to the replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items such as blades, belts, tines, etc. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty must be made to the dealer which originally sold the product and all warranty adjustments must be made through such dealer. Land Pride reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with Land Pride within 30 days from the date of purchase by the end user.



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